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The Commonwealth of Massachusetts

Second Annual Economic Report
to the Governor
and the General Court

TOWARD AN ECONOMY OF THE OPTIMUM

DOCUMENTS
COLLECTION

Submitted by

THE BOARD OF ECONOMIC ADVISORS
TO THE GOVERNOR

APRIL, 1966

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THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF ECONOMIC ADVISORS TO THE GOVERNOR
15 SCHOOL STREET, BOSTON 02108

His Excellency John A. Volpe
Governor of the Commonwealth of Massachusetts
State House
Boston, Massachusetts

Your Excellency:

In accordance with Chapter 7, Section 37 of the General Laws of the Commonwealth (1964) we have the honor of transmitting to you The Second Annual Economic Report compiled by the Board of Economic Advisors: Toward an Economy of the Optimum.

This printed form of the Report has minor changes from the original draft submitted to you on February 10, 1966.

Respectfully submitted,

Anghel Rugina
Anghel N. Rugina, Chairman

Paul W. Cherington
Paul W. Cherington, Member

Philip Puccia
Philip A. Puccia, Member

Boston, April 1966

FOREWORD

This is the 1965 Annual Report of the Board of Economic Advisors to the Governor and the General Court of the Commonmealth of Massachusetts. It is composed of the following parts:

An INTRODUCTION which explains the tasks of the Board and activities during 1965.

I. SUMMARY AND RECOMMENDATIONS

A selected list of the most urgent issues was summarized and certain recommendations were formulated.

II. A 1965 REVIEW OF THE MASSACHUSETTS ECONOMY

A cross sectional view of the Bay State economy at the end of 1965 is attempted here. To this end, a number of basic factors of our economy were considered in some detail: Population, Natural Resources, Capital Spending, Employment and Unemployment, Transportation and the Port of Boston, Defense Industries, Construction and Income Sources and Interstate Shifts.

III. ISSUES AND PERSPECTIVES

This section includes a catalogue of the more urgent issues and problems of the Massachusetts economy now and in the foreseeable future.

Since this Report is entirely the work of the three members of the Board, without the aid of staff or consultants, it is proper and perhaps even necessary to identify the authors of the various chapters. This is done in the Table of Contents.

The special message of this Report is to call the attention of the proper authorities and the public in general to three basic issues:

(1) the phenomenon of "Runaway Industries";

(2) the need for the establishment of a Central Statistical Office for the Bay State in order to acquire more and better statistical information, indipensable to any efficient administration of public affairs; and finally,

(3) the need for a wider public debate on the subject "Where are we going from here?", more specifically, to attract more interest, in and out of government circles in searching out those policies and reforms leading "Toward an Economy of the Optimum" which is a prerequisite for the realization of "The Great Free Society" in the Commonwealth of Massachusetts.

Boston, February, 1966.

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INTRODUCTION

The Task and Activities in 1965

Under Chapter 7, Section 37 of the General Laws of the Commonwealth which became effective on July 2, 1964 a Board of Economic Advisors to the Governor was established in the Office of Administration and Finance but not subject to its control and supervision. This Board is composed of three members, all experts in the field of Economics, appointed by the Governor to serve at his pleasure.

In accordance with the law the "said Board shall investigate and study the economic position of the Commonwealth and the factors affecting it, such as industrial structure, the labor force, the number of unemployed, the population and its age and geographic distribution, shifts in the defense program, technological and scientific development, financial problems of the State and municipalities, and the sensitivity of the state economy to domestic and foreign developments.

The Board shall make an annual report to the Governor and the General Court on the state of the economy of the Commonwealth, shall from time to time render reports to the Governor on such problems as he may present to it, and shall consult and advise with the Commissioner at his request." (Acts, 1964, Chap. 641, p. 561.)

To Collect and Interpret Economic Information

Given the letter and the spirit of the law, a very large area of activity has been reserved for this Board. It was conceived as a central point where available economic and financial information about the Commonwealth of Massachusetts is to be checked, refined, interpreted, digested and integrated into meaningful, useful documentary material. To collect and systematize relevant information about the Massachusetts economy and finances seems to be the first major task of the Board.

To Give Advice on Current Problems

The second major task is concerned with short-run or current problems related to the economic and financial aspects of various issues faced by the Commonwealth of Massachusetts and its institutions. The Board of Economic Advisors has no prerogatives or intention of getting involved in the process of decision-making in order to solve day-to-day practical problems, but the members of the Board have the knowledge and the skill and are qualified to work out solutions for such problems. They also can express a judgment of technical value with reference to any offered suggestion or advice.

To Plan for a Better Future

The third important task is to investigate what the State of Massachusetts can do in the long run to create favorable conditions for a steady increase in productive economic activity. The increase must be "steady" so long as the population is rising. It must also be of a "productive nature" in the sense that our available resources—human and natural—should be used in conjunction with an effective demand on the part of our people in the Commonwealth, of the people in the rest of the country and/or foreign consumers of Massachusetts products and services. Reference here is not to a temporary or artificial boost due to crash programs or lavish spending by our government, in which case the increase of economic activity cannot be self-supporting in the long run. The government of the Commonwealth will create the institutional and legal framework necessary for a normal expansion of the Massachusetts economy to its optimum. Today our available human and natural resources in many areas are used below the optimum level. The optimum is characterized by the fact that the combination of resources has reached the best possible rate of production of goods and services with maximum return for producers and the maximum satisfaction and real income for the consumers. Full employment is an end result of an economy geared to and approaching its optimum.

To Maintain Communication with Similar Organizations

The fourth but not the least important task is to get in touch and maintain communication with similar advisory boards or other pertinent agencies, first in neighboring New England States and whenever possible in the rest of the country.

In summary, to collect and systematize economic and financial information; to extend our technical advice and opinion to any government agency; to prepare the annual report to the Governor and the General Court; to think and forge new ideas and plans for a better and brighter future of Massachusetts economy, finances, government and its people, and to maintain communication with similar agencies in other states—these are the main objectives of the Board of Economic Advisors.

The 1965 Annual Report

This is the second annual report of the Board of Economic Advisors. The present Board was appointed by His Excellency Governor John A. Volpe in April 1965 and began to function in May. Because of budgetary problems, the Board operated without any staff at all until November 1965 and with a single secretary-typist after that. It has had no professional or statistical staff whatsoever and no funds to retain such a staff even on a part-time basis. In addition to this it should be remembered that the three regular members are working on a part-time basis.

Despite these adverse circumstances the Board has attempted to use every available opportunity to fulfill its legal requirements and professional obligations. If there is a moral duty to serve one's government unconditionally then this was the motto for this Board. We did not have the means to conduct a comprehensive and detailed review of the entire economy and government of the Commonwealth during 1965 nor was it possible to present at this time a complete canvass of all the economic and financial problems likely to arise in 1966. Under the given conditions we have had no choice but to concentrate on those areas which appeared to us to be significant in the overall picture and evaluation of the Bay State economy. For the rest, this report is oriented mostly at the presentation and discussion of problems of today and the foreseeable future. Factual information was included only to the extent necessary to support the existence of certain problems.

VARIOUS ACTIVITIES OF THE BOARD

It is appropriate at this time to review the activities of the Board during 1965.

On June 4, 1965 we released our first report: "Work Program for 1965-66." In this paper we spelled out the functions of the Board, the concern for a more effective approach in studying the problems at their location by the use of joint meetings, the case of sick industries, some proposals to encourage exporting of Massachusetts products, and the emphasis on the need for a Master Plan for economic expansion and financial stability of the Commonwealth.

On August 6, 1965 the Board completed its second report: "Highlights of Massachusetts Economy for the First Half of 1965." Here we presented the economic conditions from January to June 1965. Included was the outlook for the balance of the year, pertinent warning signals to be watched and a few recommendations.

In addition to these two reports we have also prepared for the Office of the Governor a number of weekly memoranda on specific issues selected and organized by individual members with the purpose of calling the attention of the higher echelon in the government to certain problems and their possible solutions. These were known as "Monday Memoranda" usually presented on that day.

One member of the Board has served at the same time as a special consultant to the Governor's Office in dealing with the difficult problem of maintaining through passenger service on the New Haven Railroad both before and after possible merger with the Penn-Central.

During the fall the Board was engaged in a series of joint meetings with representatives from industry, labor, agriculture, finance and business in order to ascertain directly from those who daily make decisions affecting the success of our economy what problems actually exist in these various branches. Other government agencies were also included, On this topic we have first had preliminary talks with representatives from the Associated Industries of Massachusetts, the Research Department of the Federal Reserve Bank of Boston, the New England Council, the U. S. Department of Labor, Bureau of Labor Statistics, the Massachusetts Division of Employment Security, the Division of Statistics of the Massachusetts Department of Labor and Industries, the Bureau of Planning and Research of the Department of Taxation, the Research Division of the Department of Commerce and Development, the Legislative Research Council, the Metropolitan District Commission and staff members of the Executive Office for Administration and Finance. Overall opinion seemed to be in favor of holding such joint meetings with the purpose of exchanging ideas, learning more about the operation and problems of other private and public organizations and increasing the spirit of cooperation so necessary in any concerted action for solving public issues.

The first such official joint meeting was with the Research Committee of the Greater Boston Chamber of Commerce on October 13, 1965 where we had the opportunity and benefit of listening to comments and suggestions in regard to our two reports issued during the summer and other current issues of the Bay State economy. The second joint meeting was with the Department of Commerce and Development, stressing the need for more communication and an open dialogue between government agencies all having the same purpose—how to serve best the people of Massachusetts. The third joint meeting was with representatives of the Northern Textile Association where we had a chance to learn more about specific problems of this branch of industry. Another joint meeting with the Massachusetts Port Authority, preceded by several preliminary talks, gave us a chance to evaluate the progress and the strains of our communication system in the air, by sea and on land. Finally, during a joint meeting with the President of the State Labor Council we had an opportunity to listen to the point of view of organized labor in regard to current issues of our state. We plan to continue such meetings during 1966.

The Board has started an investigation concerning the financial and economic conditions of our cities and towns. The answers received up to this moment show that such a survey was long overdue. The municipal and town leaders are looking for genuine cooperation with the state government. This investigation will be completed in 1966.

The Board is now planning for a 1966 Statistical Conference with representatives from a large variety of private and public organizations in Massachusetts to discuss how to improve the collection and use of statistical data in our state.

Undoubtedly the major fiscal and economic problem facing the Commonwealth in 1965 was the question of taxes, the sales tax in particular. By the time this Board took office this tax issue had passed beyond the realm of economics and into that of politics. There was little dispute that more revenue was needed, there was little question that the cities and towns needed relief from burdensome property taxes, there was little dispute that education required additional support. Even the argument to the effect that a sales tax was dangerously regressive became more and more hollow as the debate dragged on. Opposition to the sales tax appeared to have become an article of faith rather than a reasoned decision based on economic or statistical analysis. In this environment, the Board, although supporting the sales tax, could play little useful role in the many efforts of the administration to secure a solution to this cardinal economic problem. Despite the unattractiveness of the alternatives to the sales tax, despite the evidence of considerable public acceptance of it as the least undesirable form of raising new revenue and despite the obvious and admitted need for new revenue and for relief to the cities and towns, no tax measure had, of course, been passed by year-end. The eventual passage of the sales tax in March 1966 means that the Commonwealth and its officials can now return to the other major issues which confront the state.

I. SUMMARY AND RECOMMENDATIONS

The Massachusetts economy achieved a relatively high degree of prosperity during 1965. This is explained in some detail in Parts II and III of this Report. But, regardless of how much progress has been made, like in any other human endeavor, there is always room for improvement. Indeed, judging realistically the prevailing economic and financial conditions in the Bay State, one may conclude that we are still far from realizing the ideal stage of optimum level of output, income and employment. There is still much work to be done in order to achieve full employment as a result of the best possible combination and use of available resources—human and natural.

From the issues developed in Part III we have selected a representative sample which seems to be of a more urgent nature. The following recommendations refer only to this selected group of issues.

1. A Central Statistical Office For Massachusetts

We believe that there is a clear need for a central source of statistics and data so that the task of assembling the necessary information for a view of the Commonwealth's economy as a whole or particular segments of it can be quickly accomplished.

We recommend that the Governor appoint a special Commission composed of specialists in the field of statistics, economics and administration to evaluate the project of establishing a Central Statistical Office for Massachusetts, its functioning and the cost of its operation. This Commission should consider the results of the forthcoming Conference on Massachusetts Statistics as well as the results of the proposed Washington National Conference on Comparative Statistics.

This project would serve to implement the recommendation of the Governors' Conference Executive Committee which urged each Governor to establish a statistical standardization unit in his state. The functions of such an office were described in the same recommendation as including:

1. Serve as a central clearing house for statistical data within the state.
2. Encourage state agencies to improve their statistics.
3. Assist in the development of recommended standards of statistical classification.
4. Compile a state statistical handbook.
5. Represent the state in national statistical deliberations.
6. Bring together representatives of state statistical agencies periodically to discuss their current problems and projects.
7. Cooperate with Federal agencies interested in statistical standardization, such as the Bureau of the Budget and the Census Bureau.
8. Cooperate with local governments within the state in development of statewide standards.
9. Identify opportunities for proper utilization of automated data processing in this field.

"In our opinion (continues the recommendation) a state unit with authority and responsibility to carry out the functions outlined above could do much to foster improved statistical reporting and could serve as a state's coordinating unit in cooperating with other states and the federal government."

We share the views of this recommendation by the Executive Committee of the Governors' Conference. In addition, we anticipate that the Board of Economic Adivsors will work closely with the future Central Statistical Office of Massachusetts to solve some of the handicaps faced during the preparation of this Report.

2. Policies to Foster More Investment

How can we increase the volume of both private and public investment in order to bolster production of commodities and services in Massachusetts? This is of cardinal importance for providing more employment opportunities in 1966.

The presence of two factors appears to hinder the attraction of new or the expansion of existing industry. The first includes all barriers to new investment in plant and equipment. The second is the lack of adequately trained workers.

With respect to investment, the hindrances are well known. Not only does Massachusetts have insufficient incentives for new investment in plant and equipment, the property tax level makes it almost certain that such investment is relatively unattractive, either compared with other states or compared with continued operation in old, depreciated (if high cost) facilities.

It is no wonder few new major manufacturing operations have been established in the state in the last decade. Some firms can operate effectively in old mill buildings—such as garments, some electrical assembly work and the like. But increasingly major manufacturing operations call for single level buildings with adaptability for changes in machinery and manufacturing sequences. Other states can provide sites, if not complete plants, of this type, replete with utilities and access. The number of such available plants and sites in Massachusetts is limited, although some notable exceptions exist.

To create conditions for more investment the Board is suggesting that additional work and exploration be undertaken along the following lines:

1. To discover ways and means for cutting the cost of electricity for industrial purposes, which in Massachusetts is higher than in the rest of New England with the exception of Maine.
2. To consider more liberal depreciation policies for industries with difficulties or for new industries coming to Massachusetts or for all industries in general if that seems to be more effective and equitable.
3. To explore the feasibility of state legislation similar to the Prouty-Curtis Bill proposed in Congress, the main idea of which is to extend the tax credit for investment in plant and equipment to the cost of training and re-training labor by private industry. This investment in human capital by private enterprise may prove to be more efficient in the long-run and more economical than when it is done by government alone.

4. To study the Commonwealth's workmen's compensation and unemployment compensation systems to determine whether they can be made more competitive with other states without adversely affecting the interests of labor that have an economic justification. There is a pending Congressional bill, H.R. 8282, which deals with this issue. President Johnson in his message on labor legislation in May 1965 pointed out the fact that the burden of excessively high unemployment costs do exist in several states. He did not single out Massachusetts but we certainly are in that category.

3. Measures to Deal with the Problem of Retraining Labor and Meeting Shortages of Skilled and Semi-Skilled Labor

Another area where it appears that more action must be taken lies in the training and up-grading of labor. Already there is a growing shortage of skilled workers, particularly in the electrical and electronics industry. There is apparently a chronic shortage of skilled and semi-skilled workers for relatively low-paying jobs such as stitching for the garment trades. The labor supply is short also for the metal trades, shipbuilding, and leather industries. More qualified repairmen are needed for the various mechanical, electrical and electronic equipment. In certain areas recently even shortages of workers for unskilled jobs have been noticed.

The Manpower Development and Training Act of 1962 has been amended in 1965 and will continue until June 30, 1969. The purpose of this Act is to help state retraining programs for those unemployed. The Massachusetts Division of Employment Security has mobilized all its resources to put this program into action. But from December 1962 through May 1964 only 2,108 had been enrolled and 1,306 had successfully finished their retraining courses. Even though by the end of the first quarter in 1965 about 7,000 unemployed had enrolled in MDTA programs, the number is still very low when compared with the total unemployment. We recommend that the Governor request the Director of the Division of Employment Security to suggest ways and means of attracting additional unemployed workers to the program. The idea that we are moving from a surplus to a shortage of skilled and semi-skilled labor deserves more consideration. The experiment with a 2 year "Community Technical College" along the lines of up-grading labor and training for new skills, is discussed in Part III.

The Public Works and Economic Development Act of 1965 is concerned with assisting areas where substantial and persistent unemployment exists. Even though this condition is not met, an area still can benefit in this program if it has a median family income equal to 40% or less of the national level. The list of eligible areas has been published by the Division of Employment Security. (See: Appendix Table 47) The problem of how to make use of these Federal funds depends to a large extent on the ingenuity of the local leaders.

The recently appointed coordinator of Federal programs and State agencies should be encouraged to extend his advice to localities that may qualify to receive Federal assistance in accordance with this Act and should be given the necessary support to do so.

4. Some Proposals to Solve Seasonal Unemployment During the Summer

The problem of seasonal unemployment within the Commonwealth needs additional attention. One would suppose that unemployment would increase in the winter, when many out-door jobs are shut-down, and decrease in the summer. Total *employment* does behave in this manner, but the rate of unemployment behaves in the reverse direction as indicated by the following table:

UNEMPLOYMENT SITUATION
% OF THE WORK FORCE

Major Labor Areas	*May 1965*	*June 1965*	*July 1965*	*August 1965*	*Sept. 1965*
Boston	3.6	4.4	4.4	4.0	3.4
Brockton	4.0	4.8	6.1	4.7	4.0
Fall River	6.5	7.2	10.2	6.5	5.6
Lawrence-Haverhill	5.4	6.1	9.2	5.8	5.2
Lowell	7.6	8.3	8.8	7.4	6.2
New Bedford	5.8	6.4	8.3	5.3	4.9
Springfield-Chicopee-Holyoke	4.8	5.2	5.5	4.7	4.1
Worcester	3.6	4.3	4.5	4.3	3.6

Source: *Massachusetts Trends in Employment and Unemployment.* Division of Employment Security, July, August, September and October, 1965.

The bulge in unemployment rates in the months of June, July and August appears to be partly caused by new entrants into the labor force, graduates from high school and college, and partly by temporary entrants, especially students who are in the market only for the summer and who will return to school in the fall. The placement of these two types of job-seekers poses quite different problems.

GRADUATES

The graduates of high schools and colleges who enter the labor market in June are, for the most part, seeking permanent employment. The problem of placing them promptly in jobs could be greatly aided if work on this task was begun in the early spring. Vocational guidance counselors might well encourage graduating students to explore the job market early and the Division of Employment Security and high school and college placement offices could canvas business firms for probable job openings in June. The placement of these graduates would also be assisted to the extent that they received improved vocational and trade training while still in school or college.

SUMMER JOBS FOR STUDENTS

Added efforts to place students seeking summer jobs must be directed in the first instance to traditionally seasonal employers—resorts, summer camps, agricultural jobs and state jobs.

Consideration should be given to three other types of summer activities for students:

(1.) *Conservation Camps* to provide healthful outdoor work for students in developing or conserving the state's natural resources and natural beauty.

(2.) *Summer Vocational Training Courses* designed to increase skills which can place the student in a more favorable position upon his eventual graduation. Although some students undoubtedly must earn money during the summer in order to continue their education, some, at least, could devote a portion of the summer to vocational training which would assist them both in selecting a vocation or trade which attracted them and in developing at least rudimentary skills in that trade.

(3.) *Additional Children's Summer Camps* which would provide summer job opportunities for teachers and students and the opportunity for a camping experience for additional children from homes of modest means. Despite the many private and semi-charitable camps now available, numerous children cannot be accommodated at a price which their parents can afford. For social reasons it does not appear to be particularly desirable to establish special camps for deprived children. Nor does it appear desirable for the state to run or subsidize camps in competition with private camps. Ways must be found to enlarge over-all camping accommodations under private ownership and control while at the same time making it possible for children whose parents cannot meet normal fees to attend.

5. A Program to Save the Port of Boston

As discussed at somewhat greater length in Part II of this Report, there are strong economic reasons for attempting to reestablish Boston as a major northeast port. But it is equally clear that a revitalization of the Port of Boston will require the combined interest and efforts of the Commonwealth, the City of Boston, business interests and labor and, of course, a well designed plan, skillfully implemented by the Massachusetts Port Authority. Major capital improvements and major changes in practice and procedure to reduce port costs are required for any real revitalization. There is little point in making these investments and effecting these changes unless the program of revitalization is to be fully supported to its successful conclusion. Thus, during the coming year, the Port Authority should be urged to announce its overall plan for Port redevelopment, and support for the plan should be actively solicited. If such support fails to materialize, then consideration should be given to other uses for the substantial amount of potentially valuable real estate now dedicated to port activities. If substantial support for the plan is forthcoming, then a program must be developed which will assure that this support is sustained throughout the period of port revitalization. We recommend that the Governor urge the Massachusetts Port Authority to complete and issue its plan as soon as practicable, and that he give his personal attention to the revitalization plan and, if acceptable to him, to the generation of widespread support for revitalizing the Port of Boston.

6. Promotion of the Massachusetts Fishing Industry

For the last ten years the Massachusetts fishing industry has (especially in Boston) been steadily declining. As explained in Part II, the decline has been caused for the most part by the foreign competitors' ability to build more modern vessels either through government subsidy or building the vessels in a foreign country where shipbuilding costs are relatively low. The federal government in 1964 passed the U. S. Fishing Fleet Improvement Act which grants a subsidy of 50 percent of vessel cost so long as the vessel is of advanced design. The Act is a first step which should enable the Massachusetts fishing fleet to combat competitive forces and capture a greater share of the fish market.

(1.) The state must encourage the use of Fishing Fleet Improvement Act and through the Department of Natural Resources foster conferences with representatives of the fishing industry demonstrating the Act's advantages. In addition to the Fishing Fleet Improvement Act the state should consider assisting the industry with any available scientific and technical information. Thus, a better economic foundation to improve and modernize the state's fishing fleet will be provided.

(2.) The fishing industry in Massachusetts has been somewhat lax in promoting its product. It should be realized that even a small percentage increase in the demand for fish with a market so large would yield substantial rewards. In Massachusetts with one of the larger seaports in the U. S. where fishing was once the "heart" of all trade, effective promotion of this food product is woefully lacking. Nearly everyone has heard of the Maine Lobster, hardly anyone has heard of the New Bedford Scallop or the Boston Haddock. The fishing industry is urged to start immediately to organize a strong promotional force and the government of the Commonwealth should support this action by whatever means are available. We have the product, we have the opportunity to expand our market greatly—it is strange that nothing along this line has been started earlier.

7. Policies for a Better Exploitation of Massachusetts Forestry

Two-thirds of our state is covered by a surplus of unexploited hardwood forests. Economic exploitation of these forests is lacking. With the outlook for wood-using industries considerably brighter, it would appear that the Commonwealth possesses a source of wealth which is lying idle.

One of the major, but not insurmountable, problems affecting our forests is one of "ownership." That is to say, the forests in Massachusetts are owned by a great many people in small lot sizes (3-100 acres). This type of ownership is not conducive to good forest management or efficient woods operations. Through the Department of Commerce and Development, in conjunction with the Department of Natural Resources, promotional campaigns should be directed at wood-using enterprises throughout the United States to call attention to the state's immense amount of surplus hardwood timber.

(1.) Action should be taken by the state government directed at wood-using enterprises throughout the state and nation keynoting this large reservoir of available wood for which competition is virtually nonexistent at present. Other factors such as proximity to potential plant sites with adequate supplies of water and power resources and proximity to the substantial and expanding East Coast market should be constantly and persistently stressed to commercial wood users.

(2.) State employed service foresters should maintain constant contact with as many forest owners as possible, advising them of the desirability of disposition of their surplus timber when commercial interests are seeking forest products. Although the accessible timber supplies (hardwood) are not considered to be of the best quality, hardwood timber, nevertheless, can be used in many kinds of commercial wood products.

8. Lifting Restrictions on Importing Canadian Workers for Seasonal Work in Agriculture

The recent ruling made in Washington prohibiting the importation of Canadian workers at harvesting time will adversely affect the agricultural community in Massachusetts. Agriculture is a seasonal industry where risks are high and employment is far from steady. To recruit workers from the domestically unemployed is an extremely difficult task for the following reasons. (1) Harvesting provides work for only a few weeks, people seeking work are searching for a steady job. (2) Most of the unemployed are located in large cities, a good distance from farm areas. (3) Although frequently no special skills are needed for harvesting, there are methods of getting the job done efficiently and with speed, the requirements of which are lacking in the ranks of the urban unemployed.

The failure of domestic labor to do the job was clearly illustrated at apple-harvesting time in September-October 1965. It is estimated that the Massachusetts apple industry suffered a loss of approximately one million dollars. Twenty percent of the apple crop rotted away due to the lack of trained pickers. The Massachusetts agricultural industry will continue to suffer and rapidly decline unless immediate action is taken.

United action by the Governors and the U.S. Congressmen of New England should be taken to make every possible effort with the U.S. Secretary of Labor to exempt Massachusetts and New England from the ban on importing Canadian workers. At stake is the Bay State's $10 million apple industry.

9. Water Pollution

There appears to be widespread public support for a substantial reduction in the pollution of the Commonwealth's river and streams. At the same time, there is probably insufficient realization of the costs of such a program and of the potentially devastating economic effect which an ill-considered program for pollution control could have on our cities and towns and on our industries. The questions involved are both engineering and economic. A bill for a multi-million dollar sewage plant presented to some of our communities could spell economic ruin. An unrealistic and sudden requirement to install industrial waste-cleaning plants, imposed on some of our industrial companies, could well be the trigger which impelled them to leave the state.

One can be entirely sympathetic with the need for reduced water pollution and at the same time be concerned that timing and incidence of the costs of such a program be so tailored as to cause the least amount of economic hardship and upheaval. There are no easy answers, and the Board at this time has none to offer. We suggest, however, that a major issue for 1966 is to develop a program not only for cleaning the rivers but for assuring that the costs are realistically and fairly distributed among the public and industry.

A detailed study should be made of the means and costs of meeting appropriate water quality standards for our rivers and streams, of the feasible timing of these standards and of the apportionment of the costs of the program among various parties of interest. All interested parties should be represented in the study, and the study should have as a major guideline minimum economic disruption.

10. The Case of "Runaway Industries"

In specific terms we refer here to the textiles and shoe and leather industries, all traditionally top branches of economic activity in the Bay State. These industries have been on the decline for a number of years. Nevertheless, they still continue to be a major source of income and employment for the people of Massachusetts. Indeed, the textiles and textile machinery group encompassing 530 establishments in Massachusetts, employ about 50,000 workers, pay wages of some $233 million a year and produce over $400 million value-added manufacture, according to information supplied by the Northern Textile Association, with the headquarters in Boston. The New England Shoe and Leather Association reports that the 535 plants located in the Bay State employed in 1963 a total of 40,200 workers, paid $145 million in wages and shipped merchandise valued at over $600 million (F.O.B. plant).

The revival of manufacturing investment and employment during 1965 raises the question: Can we not stop the causes which initiate the phenomenon of runaway industries? As is mentioned in the third part of the report where the issue has been analyzed, it may not be possible or even desirable in a free society to infringe upon the natural mobility of the factors of production. But this is not the problem we have at hand. Some artificial causes, inside and outside of the Commonwealth, are accelerating the process of decline of these industries. The urgency and need for more attention to this problem are underscored by the fact that the same thing may happen in the future to other important industries.

The problem is: What can be done to improve the industrial climate and business conditions so that Massachusetts manufacturers of these products have a chance to compete on equal terms with producers of similar items in other states? This is no longer a private affair since there has developed a conflict of views and interests between organized labor and business management that has not been resolved over the last two decades at the bargaining table. Thus, the case of the runaway industries has become an urgent public issue and the government of the Commonwealth is bound to take corrective measures.

The Board recommends that the Governor appoint a blue ribbon commission composed of representatives of the interested parties plus a number of independent members representing the public interest to investigate the facts surrounding the textile and leather industries. The Commission's specific and primary duty is to narrow the issues which separate management and labor as to the reasons for the continued decline of these industries. It should also seek workable solutions for problems which if not resolved will lead to continued attrition.

11. Planning a Better "Business Climate" in Massachusetts

The Board would like to urge the Governor to appoint a commission of specialists to undertake a study which will spell out in clear terms for the legislature and the people of the Commonwealth the relative position of Massachusetts vis a vis other states on all the significant factors affecting the attraction, retention and expansion of industry of various types. Included in the study should be those special inducements offered by other states to new or expanded business and the extent to which such inducements or other advantages can be offered by virtue of federal subsidy or assistance. Such a study may well suggest steps which the Commonwealth might take to attract or expand industry. In conjunction with other New England states it might serve as the basis for political action at the Washington level to cut down the amount of federal largesse furnished certain sections of the country or at least to secure reciprocal benefits for this area. Above all it should serve as a common effort to revitalize the Massachusetts industrial base. One is struck in other parts of the country by the close cooperation between government, business and labor in attracting new industry and providing new industrial facilities. In the case of the NASA Electronics Research Center, the various interests in the Commonwealth showed that they could coalesce for similar purposes. An improved business climate and a revitalization of Massachusetts industry will call for a continuing combined effort of this kind.

12. Regular Conferences between Government and Representatives of Business, Labor, Industry and Finance

The Board is proposing for exploration the possibility of holding regular conferences between the Government of the Commonwealth and representatives from business, industry, labor and finance. This would give all interested parties an opportunity to express their grievances, desires or eventual proposals for solving a given problem. In this way our government would have an opportunity to listen and to evaluate at first hand the economic and financial conditions as well as the labor-management relations at regular intervals of time.

When problems arise they should be brought to the attention of the government promptly and not allowed to become chronic. A case in point is the decline of textiles and shoe and leather industries. The erosion of these industries, with its adverse effects upon the whole economy, might have been avoided if the government had been exposed to an open dialogue among all interested parties about the vital terms of the problem right from the beginning.

The Governor of the Commonwealth could play a major role in the early discussion and settlement of such matters if there is proper machinery to register impartially the facts and the opposing views. Indeed, with a good and impartial presentation of the arguments the Governor alone has the prestige and authority to induce successful mediation of this type. If an early settlement is not possible, then the

Governor will have a definite warning in time to introduce needed legislation.

On the other hand, industry, business, finance and organized labor should not be encouraged to look to the government for subsidies or special privileges which are unwarranted by the public interest. Resorting to such unilateral measures in a free society in the long run will impede the realization of an optimum level of production, income and employment, which is the surest guarantee for true progress and stability for all concerned.

During such joint conferences representatives of the business community and organized labor would have direct access to the machinery of government so that quick and efficient action could be taken to exterminate those visible and invisible factors obstructing any normally lucrative and profitable economic activity and employment of any sort. In neighboring New England states such joint meetings have proved to be fruitful. In Massachusetts this would be another step toward improving the business and industrial climate.

II. A 1965 REVIEW OF THE MASSACHUSETTS ECONOMY

1. Population

The population of the Commonwealth grew from 4,691,000 in 1950 to 5,338,000 (provisional) in 1964.[1] The Bay State now ranks 9th in population among the other states. At the beginning of this century it was 6th in the nation but during the 1930's it shifted to 8th position. These are federal statistics sources.

The decennial census conducted by the Secretary of the Commonwealth shows that on January 1, 1965 the population of our state was 5,295,281.[2] There is a discrepancy of significant magnitude between the figures reported by the Federal and the state census. This is not an error but rather the result of using different methods of enumeration.[3]

The population in Massachusetts is more stable than in the rest of the country and in New England. Indeed, between 1950-1960, the U. S. population increased by 18.5%, New England by 12.8% and Massachusetts by only 9.8%. (See: Appendix, Table 2.) On the other hand, the Commonwealth is a densely populated state. If we leave out the District of Columbia with 12,524 people per square mile since it is not a state, Massachusetts ranks third in the country with 654.5 people per square mile. It is surpassed only by Rhode Island (812.4) and New Jersey (806.7).

The annual average rate of population growth in the state dropped from 0.9% between 1950-60 to 0.8% during 1960-64. The New England average rate remained constant (1.2%) over the same period of time. The national trend in population growth shows a decline from 1.7% to 1.5%.

The male population in Massachusetts has declined during recent decades. The ratio of males per 100 females in 1940 was 95.0 and 1960 it was 93.4. Here, however, we are not out of phase with New England or other industrial states where the same ratio also declined. (See: Appendix, Table 5.) The only part in the country where this ratio in 1960 was above 100 relates to most of the states in the Mountain area, North and South Dakota and the North Pacific.[4]

The composition of the Massachusetts population by race shows the following structure in 1960:

White	5,203,144
Negro	111,842
Other races	13,592

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[1] Statistical Abstract of the United States, 1965, p. 11.

[2] Commonwealth of Massachusetts, The Decennial Census 1965 Advanced Report Compiled by Kevin H. White, Secretary of the Commonwealth, October, 1965.

[3] The above report explains the discrepancy in this way: "The Federal Census enumerates each person where he is found on the census day, regardless of whether he considers that municipality his permanent domicile or not. The Decennial Census of Massachusetts counts only those persons who claim to reside in a particular Massachusetts community. Hence, persons living on military reservations, students in educational institutions, and the like, are not enumerated in the State Census unless they consider Massachusetts their permanent residence."

[4] Statistical Abstract of the United States, 1965, p. 22.

For the changes between 1940 and 1960 consult Table 6 in the Appendix.

The foreign white stock in Massachusetts population declined from 2,273,000 in 1950 to 2,033,000 in 1960.[5] In 1950 it represented 6.7% of the total U.S. population as against only 6.1% in 1960. In absolute figures the loss in foreign white stock was almost a quarter of a million. The explanation lies partly in the fact that new immigration between 1950-60 was not enough to offset the loss by mortality in the existing stock. Besides this, a shift in population from Northeast to the Southwest and West has been registered over the same period.

The major elements of the foreign white stock in the Bay State population in 1960 were, using country of origin:[6]

Canada	545,000
Italy	311,000
Ireland	276,000
United Kingdom	193,000
Poland	137,000
USSR	129,000
Germany	55,000

One interesting observation is worthwhile mentioning, namely that former Canadians for some particular reason prefer Massachusetts over all other New England states. The following statistics speak for themselves.

Foreign White Stock from Canada in 1960:[7]

Massachusetts	545,000
Maine	162,000
Connecticut	122,000
New Hampshire	106,000
Rhode Island	78,000
Vermont	52,000

In general, foreign people seem to have a stronger attraction to live in the Bay State than in the rest of New England.[8] That makes the Bay State more cosmopolitan than other neighboring states.

With respect to length of life conditions the average age of a citizen of the Bay State is relatively high. In 1960 the median age in the Commonwealth was 32.1 years as compared with a median age of 29.5 for the nation as a whole. In New England all other states with the exception of Rhode Island (34.9) in 1960 had a median age lower than in Massachusetts.

2. Natural Resources: Agriculture, Forestry and Fisheries

AGRICULTURE

The ability to derive a greater rate of return on capital through the use of land for industrial, commercial or residential purposes rather than agriculture inevitably has led to the drastic curtailment of agricultural activities in the state.. Urbanization is also responsible for the absorption of farm land. Farm land in Massachusetts declined by about 31% from 1950-59 whereas for the entire U.S., farmland registered a mere 4% decline. Massachusetts is densely populated; the trend is toward industrial expansion, factory growth, high income and employment.

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[5] "Foreign white stock" includes those inhabitants of the Bay State who are foreign born or natives of foreign or mixed parentage.

[6] Statistical Abstract of the United States, 1965, p. 28. For Ireland see: The 1960 Census of Population, Characteristics of Population, Vol. 23, Massachusetts.

[7] Statistical Abstract of the United States, 1965, p. 28.

[8] Statistical Abstract of the United States, 1965, p. 28.

This trend is typified by the sale of the H. P. Hood Experimental Dairy Farm in Beverly, Massachusetts after one hundred years of dairy activity. The reason given was that the land was just too valuable for farming. Local towns and cities undertake costly promotional and publicity campaigns in order to increase the number of industrial plants. As the Massachusetts industrial complex grows, the farmer's ability to extend his landholdings diminishes and the economic viability of his existing farm declines. What city fathers and town elders would turn away an electronics firm desiring to erect a factory on rich farm land? As city and town expenditures for providing attractive schools and other services rise, sources of income must also rise. Hence, new business activity is avidly sought in almost all cities and towns.

The financial status of agriculture in Massachusetts can be seen in Table 1.

TABLE 1

Selected Agricultural Data
Massachusetts and the United States

(All figures except percentages
are in millions of dollars.)

Cash Receipts from Farm Marketings—	*1950*	*1955*	*1960*	*1963*
Massachusetts	188.4	169.8	159.3	159.0
U.S.	28,512.0	29,556.0	34,012.0	36,925.0
Mass.—% of U.S.	0.66	0.57	0.47	0.43
Total Realized Gross Farm Income—				
Massachusetts	205.0	186.9	175.9	176.5
U.S.	32,482.0	33,332.0	37,934.0	41,737.0
Mass.—% of U.S.	0.63	0.56	0.46	0.42
Farm Production Expenses—				
Massachusetts	148.9	146.0	142.5	144.9
U.S.	19,297.0	21,862.0	26,242.0	29,219.0
Mass.—% of U.S.	0.77	0.67	0.54	0.50
Realized Net Farm Income—				
Massachusetts	56.0	40.9	33.3	31.6
U.S.	13,185.0	11,470.0	11,692.0	12,518.0
Mass.—% of U.S.	0.42	0.36	0.28	0.25

Source: Commonwealth of Massachusetts First Annual Economic Report to the Governor and the General Court, December 22, 1964, p. VII, 26.

Massachusetts agriculture is by no means prosperous. As an industry, U.S. agriculture as a whole yields a relatively low income. The agriculture in Massachusetts yields a proportionately lower income than the national average, and the income both absolutely and as a percentage of gross is declining.

Farm Ownership and Farm Labor

It is estimated that there are about 11,000 farms in Massachusetts but of these only 3,600 farms are truly commercial enterprises, with sales of farm products averaging $10,000 annually. The remaining farms are operated on a part-time basis and in many cases the part-time farmer derives a greater proportion of his income off the farm than from the farm. Farmers who must rely upon seasonal or transient labor for harvesting, of crops can be seriously handicapped at harvest time. This problem arose in September 1965 during apple harvesting. Faced with declining cash receipts and realized net farm income, the agricultural community must now come to grips with a serious labor problem. A federal law now prohibits the importation of foreign labor for crop harvesting. Migratory workers from Canada are now forbidden to work on U.S. farms, except with the express permission of the U.S. Department of Labor. As a general rule, farm laborers must now be drawn from domestic sources. The problem becomes acute for farm owners since an available supply of this seasonal type of labor may be difficult to obtain. Although it was thought that no serious side effects would appear, the aftermath of the harvest tells a different story. The result of this law and its impact on the state's apple crop is best summed up in an article in the Boston Globe. It states: "The Massachusetts' apple industry lost $1 million this year with 20 percent of a bumper crop of 3.2 million bushels rotting away for want of trained pickers. U.S. Labor Department restrictions delayed importation of trained Canadian pickers until it was almost too late. The use of amateur pickers from Youth Corps and unemployed rolls was a near total failure. The future of the Bay State's $10 million apple industry is at stake, with immediate remedial action by state and federal leaders imperative."

The ranks of the unemployed are basically not efficient farm laborers nor, in most instances, will they seek this type of seasonal work. Consequently, farm owners in cooperation with state and federal agencies must of necessity undertake involved advertising campaigns prior to harvesting throughout the state and elsewhere. The flexibility of the farmer in attracting a certain number of workers at a certain period of time is significantly reduced. Also, domestic workers are for the most part at a higher wage rate although piece-work operations may negate this factor somewhat. For these and other reasons, many farmers have been attracted by the better economic opportunities in other industries.

The state's agricultural activity based on cash receipts is summarized in the following tables.

TABLE 2

MASSACHUSETTS CASH RECEIPTS FROM FARM MARKETINGS, SELECTED YEARS

A-1964

Commodity	*Value ($1,000)*	*Share of State Total*	*% of N. E. Total*
Dairy			
Milk & Milk Products	$ 50,428	30.9%	
Veal Calves & Cull Cows	5,004	3.1	
Total Dairy	55,432	34.0	
Poultry			
Eggs	23,002	14.1	
Poultry Meat	8,488	5.2	
Total Poultry	31,490	19.3	
Greenhouse & Nursery	$ 23,672	14.5%	
Vegetables	13,514	8.3	
Tobacco	9,257	5.7	
Fruit	8,526	5.2	
Cranberries	7,865	4.9	
Potatoes	3,970	2.4	
All Other	9,538	5.8	
Total	$163,264	100.0%	22.0

B-1959

Commodity	*Value ($1,000)*	*Share of State Total*	*% of N. E. Total*
Dairy			
Milk & Milk Products	$ 47,579	30.3%	
Veal Calves & Cull Cows	6,830	4.4	
Total Dairy	54,409	34.7	
Poultry			
Eggs	27,709	17.7	
Poultry Meat	12,716	8.1	
Total Poultry	40,425	25.8	
Greenhouse & Nursery	20,134	12.8	
Vegetables	12,652	8.1	
Fruit	6,495	4.1	
Tobacco	6,246	4.0	
Cranberries	2,973	1.9	
Potatoes	2,439	1.6	
All Other	10,951	7.0	
Total	$156,724	100.0%	23.0

TABLE 2—Continued

C-1949

Commodity	*Value ($1,000)*	*Share of State Total*	*% of N. E. Total*
Poultry	$ 61,130	33.4%	
Dairy Products	44,719	24.5	
Truck Crops	18,508	10.1	
Miscellaneous	17,283	9.5	
Tobacco	12,173	6.7	
Meat Animals	11,348	6.2	
Fruit	8,618	4.7	
Potatoes	4,597	2.5	
Cranberries	4,298	2.4	
Total	$182,674	100.0%	25.6

Source: U. S. Department of Agriculture.

Over the last two decades only dairy products have demonstrated *real* growth in cash recipts. The biggest single factor accounting for the decline in total Massachusetts agricultural cash receipts is the abrupt downturn in poultry products. This reduction in poultry output has and is occuring at a time when the national trend of eggs and broiler output is on the rise. The decline in Massachusetts poultry appears to be due in part to the marked transportation rate advantages enjoyed by southern producing areas.

FORESTRY

For many years the decline in Massachusetts agriculture and the flight of the farmer from the land have resulted in large plots of former agricultural land being reclaimed by the forests. It is estimated that in the mid-eighteenth century a 2 million acre forest cover existed in the Bay State. A century later, about two-thirds or 3.26 million acres of the state's five million acres are covered by forests.

This huge forest area, the growth of which was due to economic factors inherent in the growth of manufacturing, is more clearly demonstrated by the following: Massachusetts, occupying 0.22 percent of the land area of the United States is now endowed with 0.43 percent of forests in the United States. This forest of 3.26 million acres[1] is privately owned with the exception of 268,000 acres or 11 percent in State, county and municipal ownership and 1 percent or 29,000 acres federally owned.

Forestry employment has been variously estimated at 1500-2000 loggers, foresters and other workers with annual receipts of $1.5 million. It should also be noted that the state's lumber, paper and furniture industries employ more than 50,000 persons.

The annual output of timber products, as estimated by the United States Department of the Interior, amounts to 115 million board feet of sawlogs, 19,000 cords of pulpwood, and about 12 million cubic feet of wood for other products. The natural growth is estimated to be in excess of current timber requirements. Therefore a natural surplus of forest land exists.

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[1] Estimated by the U. S. Department of the Interior.

MASSACHUSETTS FOREST OWNERSHIP

The surplus forest area has been growing unattended for many years and is still continuing. Despite the availability of services leading to improved forest management, Massachusetts forests are not being commercially utilized to the fullest extent, partly due to the competition of out-of-state lumber and partly due to the small size of forest holdings in the Commonwealth. One of the foremost reasons for the underutilization of Massachusetts forest resources is the size distribution and ownership pattern of the state's privately owned forests. The table below demonstrates the size distribution of our privately- owned forests.

It is estimated that only eight percent of the total acreage is in the hands of people primarily engaged in forest industries. Basically, then the division of a forest into thousands of small wood lots owned by people whose main interest lies outside of the forest poses impediments to the economic development for a wood industry. Small wood lots tend to yield a low return, efficiency of operation tends to be lacking, and the incentive to exploit these resources adequately is lacking.

WOOD INDUSTRY OPPORTUNITY

In spite of the drawbacks mentioned earlier, these forest resources, particularly the hardwoods can provide the opportunity for new or expanded commercial wood production. The problem of ownership need not be so discouraging as to completely prevent economic development of the state's forests. The huge surplus of hardwood in the hands of so many owners would probably make it unnecessary for new large commercial wood users to purchase large parcels of timber land to protect supplies. Rather, they could rely on normal market forces, on improved education of wood lot owners and on the acquisition of cutting rights (but not land) in order to insure an adequate future supply.

The heart of the state's hardwood timber is located in Central and Western Massachusetts. This area offers other good reasons for commercial wood operations since water and power resources are readily available. There is an ample supply of labor, good plant sites are also available and forestry services can easily be obtained.

TABLE 3

SIZE DISTRIBUTION OF PRIVATELY OWNED MASSACHUSETTS FORESTS, 1952

Size of Individual Holdings	*No. of Owners*	*Total Acreage*
3 - 50 acres	15,000	300,000
50 - 100 acres	10,000	914,000
Total under 100 acres	25,175	1,214,000
100 - 500 acres	4,316	1,262,000
500 acres and over	267	384,000
Totals	29,758	2,860,000

Source: Studies by U. S. Department of Agriculture, Experiment Station in Southern New England and by University of Massachusetts Department of Forestry and Wildlife Management.

The Commonwealth's reservoir of available hardwood which is largely unexploited economically suggests the need of a major effort to attract and hold additional hardwood-using industries.

FISHERIES

The state fishing industry is concentrated for the most part in three major ports—Boston, Gloucester and New Bedford. Each port concentrates on different species of fish and consequently uses different techniques and equipment. Once "The cornerstone of New England prosperity" the fishing industry now plays a substantially reduced role in the state's economy.

From the peak years of the early fifties through 1963 the quantity and value of fish landed has declined substantially in Boston by approximately 40 percent in quantity and by 22 percent in value. In Gloucester there has been a quantity decline of 40 percent and a decrease in value of 35 percent. New Bedford, however, experienced in this same time period significant increases in quantity landed, 35 percent and a rise of 60 percent in value. For the fishing industry as a whole, a quantity decline of 27 percent has occurred in Massachusetts ports with a value decrease of only 3 percent.

Ranked in order of importance by species are first of all haddock which accounts for about 25 percent of both the quantity and value landed in 1963. The bulk of the landings of this species was concentrated in Boston. Haddock has experienced some stability in the value of landings with a moderate decline in quantity (133.9 million lbs. in 1953 to 121.0 million lbs. in 1963). Next, in order of importance is the flounder industry capturing 20 percent of weight and 19 percent of value in 1963. This species is almost wholly concentrated in New Bedford. Unlike haddock, flounder has recorded a substantial gain in quantity landed of 141 percent from 1953 to 1963 and a significant gain in value increasing by 64% in the same period.

From the standpoint of value, sea scallops come next with 19 percent of Massachusetts landings in 1963, but only 4 percent on a quantity basis. Over the ten year span 1953-1963 the value of sea scallops has moved irregularly. The quantity of sea scallops landed increased steadily from 1953 to 1961 and then declined.

Next, in order of importance, come ocean perch and whiting, accounting for 5 percent and 4 percent of the value of landings in 1963. These species are almost wholly concentrated in Gloucester.

Although the Commonwealth has undergone a period of decline in both value and quantity landed (1952-1963), all New England fisheries have experienced a 5 percent increase in quantity with a corresponding 20 percent increase in value.

This pattern of Massachusetts decline is further reflected in a decline in the number of vessels from 638 to 448 with a corresponding reduction of employment on vessels from about 5000 in 1953 to 3300 in 1963. Nevertheless, overall employment in Massachusetts commercial fishing industry (including processing) has remained stable at around 10,000 for the decade involved.

In 1953 the normal manner of marketing fish was in the form of fresh and frozen fillets. Then the industry went through a marketing revolution. A new manner of marketing was developed, namely, the "frozen fish stick." These "sticks" are made from Cod blocks largely imported from Canada at low import duties. The easy accessibility to cod fish supplies by Canadian fishermen practically closed the door on Massachusetts fishermen in a rapidly expanding market. The phenomenal rise in this new market of prepared fish sticks grew so swiftly that it now comprises almost one-half of the total market supply of groundfish. Iceland and Canada supply about 65 percent of all groundfish used in the United States.[2]

The inability of Massachusetts to compete in this new market commencing in 1953 signaled the decline in Massachusetts fisheries. Any industry in order to be profitable must constantly attract new capital in order to improve, to maintain or enhance its competitive position. New capital provides the modern techniques and methods to increase an industry's productivity thereby allowing that industry to compete more effectively and to make a reasonable profit and return on investment. Capital inevitably seeks out the best return. It is in this area of return on investment that Massachusetts is woefully inadequate. Competitive forces in Canada and Iceland have been able through their ability to attract new capital to attain more modern fishing techniques and equipment. They have thus been enabled to significantly increase their productivity in the fishing industry. In turn, their productivity advantages over New England allows them to reduce prices and capture a larger share of the market.

The essence of the problem now comes to the forefront in the form of a basic question. Why have the Canadians been able to attract new capital which in turn provides more modern equipment and thus productivity increases? One of the major answers seems to lie in government subsidies. A Canadian entrepreneur can have a vessel built anywhere in the world and imported duty free. If the vessel is built at home a 50% subsidy is provided by the Canadian government. In addition to government subsidies, many of the Canadian provinces provide interest free loans or loans with rates less than the prevailing rate. Therefore, the Canadians have provided economic incentive to improve and modernize their fishing fleet.[3]

In a study conducted by the Federal Reserve Bank of Boston of 100 representative fishing enterprises in New England it was revealed that average yield after taxes was 1.4% on net worth. According to the Federal Reserve's study, only the larger trawler operators tended to be profitable while most smaller vessels operated at a loss.

The Massachusetts fleet is old and obsolete. Vessels are smaller and consequently time at sea is reduced. On older vessels fixed costs tend to rise and with prices relatively stable or increasing only slightly, the profit pinch becomes acute.

The incentive to invest in the fishing industry is discouraged in no small way by a law passed in 1792 prohibiting the construction of a fishing vessel in foreign countries, where costs are lower and equipment more advanced. In an attempt to offset the equipment advantage on foreign vessels the Fishing Vessel Construction Differential Program was passed which allows a subsidy of up to one-third of vessel cost. However, in the opinion of those in the industry the one-third subsidy is not enough since the foreign shipyards are able to construct a modern fishing vessel more than one-third lower than domestic shipbuilders. In August of 1964 Congress passed the United States Fishing Fleet Improvement Act which grants a subsidy of up to 50 percent of vessel cost so long as the vessel is of advanced design. This act, long overdue, represents a significant step forward for Massachusetts and the entire New England fishing industry. There is now a chance to stem existing competitive forces and capture an equitable share of the fish market.

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[2] Federal Reserve Bank of Boston, *New England Business Review* (August, 1965)—The New England Fishing Industry, Part I.

[3] Federal Reserve Bank of Boston, *New England Business Review* (September, 1965)—The New England Fishing Industry, Part II.

Although the initial step must of necessity be in improved modern vessels, more aggressive promotional and publicity work should also be undertaken on the part of industry associations and other groups. A small increase in the demand for fish with a market so large would yield substantial rewards. The uses and value of fish must be constantly before the public.

A fisherman's training program initiated in Boston in 1963 by the vessel owners and the Atlantic Fishermen's Union with the help of federal funds, will aid the industry in recruiting younger men to an industry where the average age of fishermen is about 50 years.

3. Capital Spending in 1965

Besides conditions of employment, knowledge of capital spending is useful in finding out how an economy behaves and where it is headed. Unfortunately we do not have adequate or sufficient statistical information on this subject. At the present time virtually the only available data on capital spending is compiled by the Research Department of the Federal Reserve Bank of Boston. Since this Bank is a regional one, the collection of capital spending data is directed to New England as a whole. Two surveys are conducted every year, a major one in the spring[1] and a second one in the fall using a much smaller sample. The results of both surveys are reviewed in the New England Business Review, the official publication of the Bank. There is no independent review of the statistical data pertaining to Massachusetts. The information used below, if not otherwise stated, comes from supplementary tables extracted from the same two surveys and was supplied by the Bank.

Capital spending for Massachusetts' manufacturers in 1964 was estimated at $282.7 million. In 1965 planned capital spending as indicated by a revised figure in the fall survey of the Bank increased to $318.5 million. This represents an increase in capital spending of 12.6% over 1964.

The economy of the Commonwealth behaved better than expected since the Bank's spring survey forecast an increase of only 9.2%. Nevertheless, judged by the performance of all manufacturing, increases in capital spending in Massachusetts in 1965 lagged behind the increase in New England as a whole. The survey shows that the capital spending of New England manufacturers in 1965 advanced by 17.8% over 1964. At the national level the biggest increase in the business spending was in the manufacturing field, with an expected rise of 21% over 1964.

The growth in Bay State investment was mostly in the durable goods sector where capital spending in 1965 jumped by 26.7%, whereas in the group of nondurable goods industries a slight decline of 0.3% was registered. In absolute figures the best areas of investment in the hard good industries were in machinery, instruments, transportation equipment and ordnance. The information available shows:

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[1] During the February-early April survey a number of 786 firms replied and that accounts for 28% of the New England manufacturing employment.

CAPITAL SPENDING
(in thousands of dollars)

Durable Goods	*1964*	*1965*	*Change 1964-65*
Machinery	31,106	47,883	+16,777
Instruments	22,580	30,661	+ 8,081
Trans. Equipment	8,789	15,974	+ 7,185
Ordnance	2,620	3,942	+ 1,322

These are well-known defense oriented industries. In the nondurable goods sector the best absolute gains were recorded by rubber, leather and shoes, textile and chemicals as indicated by the following statistical evidence:

CAPITAL SPENDING
(in thousands of dollars)

Non-Durable Goods	*1964*	*1965*	*Change 1964-65*
Rubber	17,733	25,268	+ 7,535
Leather and Shoes	8,258	11,093	+ 2,835
Textiles	14,490	17,301	+ 2,811
Chemicals	12,004	14,763	+ 2,759

By industry and expressed as percentage gains in 1965 over 1964, the largest increases in capital spending, can be found in the following branches of industry: transportation equipment, 81.7%; machinery, 53.9% ordnance, 50.4%; rubber, 42.5%; furniture, 37.0%; instruments, 35.8%; leather and shoes, 34.3%; chemicals, 23.0% and textiles 19.4%. The smallest increases were registered in stone, clay and glass, 6.2%; electrical machinery, 6.1%; primary metals, 8.5%; and printing, 9.6%.

A decrease in capital spending for 1965 was reported in the following branches: food, 26.2%; paper, 21.0%; lumber and wood products, 18.9%; and fabricated metals, 2.6%. In absolute figures the reductions were as follows:

CAPITAL SPENDING
(in thousands of dollars)

	1964	*1965*	*Change 1964-65*
Food	28,038	20,705	— 7,333
Paper	31,238	24,672	— 6,566
Fabricated metals	24,230	23,597	— 633
Lumber and wood products	1,822	1,477	— 345

With respect to that portion of capital spending devoted to new plants in 1965 (acquisition of land and buildings) Massachusetts had a slight decline of 1.2% over 1964 in 1965. New England shows no change between 1964 and 1965 in the aggregate. The detailed picture by industry presents some peculiarities. Whereas in Massachusetts the investments in new plants for durable goods increased by 7.9% in New England as a whole they decreased by 11.2%. The explanation appears to lie partly in defense industries which apparently have received a stronger push in Massachusetts, as compared with the rest of New England. The lumber and wood products industries also invested substantial funds for development of new plants. In the nondurable goods sector Massachusetts faced a decline of 10.1% in capital spending for new plants compared to a total New England increase of 10.9%. This is explained by the fact that the printing, leather and shoes industries in New England as a whole increased their investments in a much greater degree than in Massachusetts. On the other hand, electrical machinery, instruments, stone, clay and glass, paper and chemicals in 1965 showed declining expenditures for new plants, both in the Bay State and New England.

Capital spending for new machinery and equipment in 1965 for all manufacturing industries advanced by 16%. The bulk of the increase was in the durable goods industries with an advance of 31.7% over 1964. Transportation equipment, instruments and ordnance increased their capital spending for this kind of investment by more than 50%. In the sector of nondurable goods there is an increase of 21% in the aggregate. Machinery and equipment investment in food, textiles, paper and leather and shoe industries declined in 1965. On the other hand, chemicals, rubber, apparel and printing showed a rise. In New England as a whole the picture again appears to be reversed in the sense that the nondurable goods industries have increased this kind of investment in a much greater proportion than in the sector of durable goods, just the opposite of the conditions prevailing in the Bay State. The explanation lies in the fact that textiles, chemicals, paper and printing—all non-durable goods—show much higher rates of investment growth in New England as compared with Massachusetts.

If we examine the relationship between capital spending for expansion versus replacement we find the Massachusetts economy trend running counter to the rest of New England.

CAPITAL SPENDING FOR EXPANSION
(% of total)

Massachusetts	*1964 (Actual)*	*1965 (Revised)*
All manufacturing	42.5%	38.2%
Durable goods	38.0%	42.6%
Nondurable goods	46.9%	33.2%
New England	*1964 (Actual)*	*1965 (Revised)*
All manufacturing	39.6%	45.5%
Durable goods	37.8%	42.6%
Nondurable goods	41.6%	48.5%

CAPITAL SPENDING FOR REPLACEMENT
(% of total)

Massachusetts	*1964 (Actual)*	*1965 (Revised)*
All manufacturing	57.5%	61.8%
Durable goods	62.0%	57.4%
Nondurable goods	53.1%	66.8%

New England	*1964 (Actual)*	*1965 (Revised)*
All manufacturing	60.4%	54.5%
Durable goods	62.2%	57.4%
Nondurable goods	58.4%	51.5%

Source: The Federal Reserve Bank of Boston, *Survey of Capital Spending,* 1965.

The economy of the New England area indicates a trend toward an increased proportion of spending for expansion (as against replacement) in both durable and nondurable goods industries. The Bay State economy is on a different track. If we take for instance all manufacturing in the aggregate, the capital spending for expansion in 1965 in Massachusetts declined from 42.5% (1964) to 38.2% (1965) as against a rise from 39.6% (1964) to 45.5% (1965) in the New England area. In the sector of durable goods there was an increase in capital spending for expansion which brought the Bay State with 42.6% (1965) to the same level as the rest of New England. But the nondurable goods industries in this respect declined in Massachusetts to a low of 33.2% (1965) which put the Bay State far behind the regional level of 48.5% (1965).

The poor record of the Massachusetts' nondurable goods industries in capital spending for expansion is in contrast to their very favorable rate of operation in 1965, as seen by the following table.

CAPACITY—RATES OF OPERATION

Massachusetts	*capacity utilization*	
	End of 1964	*Fall of 1965*
All manufacturing	86%	88%
Durable goods	84%	85%
Nondurable goods	87%	92%

New England	*capacity utilization*	
	End of 1964	*Fall of 1965*
All manufacturing	83%	84%
Durable goods	81%	82%
Nondurable goods	85%	87%

In light of the foregoing it is appropriate to consider whether the apparent slowing up of new investment for expansion in our nondurable goods industries is a correctable situation. Does the reason lie in the business climate for investment which is not bright enough to attract more risk taking? Can this phenomenon be correlated with the structure and level of taxation in the Bay State as compared with the rest of New England? Is this a temporary or a long-run phenomenon? All these questions are sufficiently significant to necessitate a more thorough investigation. For the time being one may venture the conclusion that Massachusetts in terms of expansion in 1965 and in certain areas was behind New England as a whole. Here are more statistical data of detail in support of such a conclusion:

CAPITAL SPENDING FOR EXPANSION
(% of total)

Massachusetts	*1964 (Actual)*	*1965 (Revised)*
Ordnance	21.7	6.6
Stone, Clay & Glass	57.1	16.0
Transportation equipment	45.6	4.2
Food	44.6	7.5
Textiles	41.9	0.5

New England	*1964 (Actual)*	*1965 (Revised)*
Ordnance	16.6	6.6
Stone, Clay & Glass	47.9	56.0
Transportation equipment	33.0	20.9
Food	46.3	31.3
Textiles	10.9	11.8

The revised figures for 1965 are estimated from very small samples and actually only for the first three quarters of 1965. Caution is therefore, recommended in their use. To judge the magnitude of the problem there is need for more comprehensive statistical information. Nevertheless from the available data a decline is evident in the investment for expansion in ordnance, transportation equipment, stone, clay and glass, food and textiles. Even if we would accept the thesis that the Bay State is in a process of structural change in losing its industrial character, a process pertaining to the whole New England region, looking at the above statistical data Massachusetts appears weaker as compared with neighboring states. Thus the conclusion that our economy, in terms of expansion in 1965 and in certain areas, was less efficient than the rest of New England seems to be justified.

4. Employment and Unemployment

The Bay State economy started 1965 with a relatively favorable employment picture as compared with previous years. A number of statistics pointed toward a good year ahead for employment and other economic conditions. During the year these bright expectations were achieved to a large extent, and in certain areas, even exceeded as will be shown further in the text.

In January 1965 the work force stood at 2,309,100 and total employment had reached 2,174,100 with 133,500 unemployed or 5.8% of the work force.[1] In labor disputes were involved 1200. From 1960 to 1965 (November) the work force increased by 82,200 whereas total employment jumped by 100,000. The effect of this favorable situation can be seen in the decline of unemployment by 15,100 over the same period of time. This and other encouraging signs are visible in Table 1.

Average weekly hours for which a production worker earned income in January 1965 were 39.9 as against 38.7 during the same month in 1964. Average weekly earnings for manufacturing labor in January 1965 were $96.10 as against only $90.95, a year earlier. A worker in manufacturing was paid in January 1965 an average rate of $2.41 as compared with only $2.35 in January 1964.[2]

At the end of the year the average weekly earnings for a production worker increased to $102.25. The average rate per hour in December 1965 was $2.50.

The income of the working man in 1965 was higher not only because he was paid a higher rate of wages but also because he had an opportunity to work more hours per week.

The major labor areas in the Commonwealth provide a more detailed picture of the employment situation over the same period of time. In January 1965 there was only one major labor area with a rate of unemployment above 10%—Fall River at 11.1%. In January 1964 there had been four areas with unemployment rates above 10%. The following table gives a more complete view of the differences in unemployment rates between the month of January 1965 as compared with the same month in 1964.[3]

Two major labor disputes marred the record in January 1965. One was the strike of the International Longshoremen against the East and Gulf Coast Shippers. The other was the General Electric Company strike at the Everett plant and the River Works in Lynn. These labor disputes were settled by mid February, but meanwhile over 9,000 workers had been idled. The unemployment rate for February rose to 6.1% due partly to poor weather.

At the end of the first quarter the unemployment situation appeared substantially improved at the rate of 5.5%, the lowest March figure since 1957.

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[1] The work force and unemployment estimates were revised recently by the Commonwealth of Massachusetts Division of Employment Security. See: Supplement No. 1, Employment and Unemployment in Massachuseets. A Work Force Report, 1950-1964. November, 1965.

The previous estimates show for January, 1965 a number of 138,600 unemployed or 6% of the work force. In January, 1964 unemployment had been indicated at 164,400 or 7.1% of the work force. See: Massachusetts Trends in Employment and Unemployment. Research Department, Division of Employment Security, February, 1965, Vol. 1, No. 1.

[2] Massachusetts Department of Labor and Industries. Division of Statistics. Employment News Letter of February, 1965.

[3] Massachusetts Trends in Employment and Unemployment. Research Department, Division of Employment Security, February, 1965, Vol. 1, No. 1.

TABLE 1

MONTHLY REPORT OF THE WORK FORCE EMPLOYMENT (in thousands) AND UNEMPLOYMENT

Period	The Work Force	Total Employment	*Employment*		All Other	Labor Dispute	Unemployment	*Unemployment Rate (Percent of Work Force)*			
			Nonagricultural	Agricultural				Unadjusted		Seasonally Adjusted	
								Mass.	U.S.	Mass.	U.S.
1960	2,288.8	2,170.0	1,916.7	20.0	233.3	4.2	114.6	5.0	5.6	—	—
1961	2,320.4	2,185.6	1,958.0	18.0	238.0	0.0	134.8	5.8	6.7	—	—
1962	2,332.1	2,206.8	1,958.0	17.2	231.6	1.5	125.3	5.4	5.6	—	—
1963	2,331.4	2,195.2	1,955.8	17.1	219.4	0.5	132.1	5.7	5.2	—	—
1964	2,331.9	2,195.2	1,963.4	16.5	222.3	1.6	134.6	5.8	5.7	—	—
Oct.	2,327.9	2,218.3	1,983.5	18.7	216.1	2.5	107.1	4.6	4.4	—	—
Nov.	2,336.8	2,222.5	1,999.5	12.0	220.0	0.0	114.3	4.9	4.5	—	—
Dec.	2,359.1	2,240.1	2,008.2	11.0	220.9	0.0	119.0	5.0	4.7	—	—
1965											
Jan.	2,309.1	2,174.4	1,951.9	11.0	211.5	1.2	133.5	5.8	5.5	—	4.8
Feb.	2,306.8	2,162.1	1,939.7	11.8	210.6	9.4	135.3	5.9	5.7	—	5.0
Mar.	2,309.6	2,182.1	1,959.3	12.0	210.8	0.2	127.3	5.5	5.1	Information Not Available	4.7
April	2,329.3	2,212.7	1,982.6	12.2	217.9	0.0	116.6	5.0	4.8		4.9
May	2,359.8	2,249.3	2,002.4	16.7	230.2	1.3	109.2	4.6	4.4		4.6
June	2,397.8	2,273.8	2,031.6	19.4	222.8	0.8	123.2	5.1	5.1		4.7
July	2,406.5	2,273.5	2,029.2	23.0	221.3	0.6	132.4	5.5	4.6		4.5
Aug.	2,394.9	2,286.9	2,043.6	23.0	219.3	0.2	107.8	4.5	4.2		4.5
Sept.	2,368.8	2,273.4	2,042.3	20.9	210.3	0.4	95.0	4.0	3.8		4.4
Oct.	2,366.7	2,043.7	2,043.7	18.5	212.9	0.5	91.1	3.8	3.6		4.3
Nov.	2,371.0	2,270.1	2,045.7	12.0	212.8	1.4	99.5	4.2	4.1		4.2
Dec.	2,389.3	2,283.0	2,060.9	12.0	210.1	2.1	104.2	4.4	3.8		4.1

Source: The Commonwealth of Massachusetts Division of Employment Security.

TABLE 2

AREA TRENDS IN UNEMPLOYMENT

	January, 1965			January, 1964	
*Major Labor Areas**	*Number Unemployed*	*Ratio to Work Force*	*Area[1] Class.*	*Number Unemployed*	*Ratio to Work Force*
Boston	61,800	5.1	C	71,400	5.9
Brockton	3,600	7.1	D	5,450	10.9
Fall River	6,050	11.1	E	7,550	13.3
Lawrence-Haverhill	6,800	7.7	D	7,050	7.8
Lowell	5,420	9.6	E	5,640	10.8
New Bedford	5,400	9.0	D	6,100	10.0
Springfield-Chicopee-Holyoke	13,300	6.4	D	15,100	7.3
Worcester	8,300	6.0	C	9,650	7.4

* Standard Metropolitan Statistical Areas (SMSA) as defined by the U. S. Bureau of the Budget. According to the U. S. Census of Population 1960, these Areas account for almost 80 percent of the population of the Commonwealth.

Labor Supply Category	*Description*	*Unemployment as % of Work Force*
Group A	Overall Labor Shortage	Less than 1.5%
Group B	Low Unemployment	1.5 to 2.9%
Group C	Moderate Unemployment	3.0 to 5.9%
Group D	Substantial Unemployment	6.0 to 8.9%
Group E	Substantial Unemployment	9.0 to 11.9%
Group F	Substantial Unemployment	12.0 or more

Source: Massachusetts Trends in Employment and Unemployment, Research Department, Division of Employment Security, February, 1965, Vol. 1, No. 1.

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[1] Explanation of Area Classification. A letter classification code is assigned to each major area. The unemployment rate is a key factor in determining the appropriate area classification, but it is not the sole criterion. Consideration is also given to the area's employment outlook, as reflected by local employer estimates of their manpower requirements, the relationship between labor supply and demand, the seasonal pattern of employment and unemployment fluctuations in the area, and several other factors.

April moved still faster toward more economic expansion. Employment increased in all non-factory types of business with the exception of transportation and public utilities. The largest rise was in the contract construction, trade and service industries. Unemployment declined to a low of 5.0% of the work force.

As a result of these better economic conditions two of the six major labor areas were reclassified. The Springfield-Chicopee-Holyoke area moved to class C, whereas for more than seven years this area has been in class D (substantial unemployment). The Lowell area moved from class E to class D, and North Adams was removed from the list of substantial unemployment.

During May the economic expansion continued. Unemployment went down to 4.6%, the lowest May rate since 1959. Good weather had a favorable effect on construction, trade and service industries. The number of government employed persons increased, especially young people in the Neighborhood Youth Corp, financed mostly by the Federal Government.

Within the major labor areas Brockton changed from class D (substantial unemployment) to class C (moderate unemployment). In May 1964 there had been only one area—Boston—with a rating as high as C (moderate unemployment). In May 1965 there were four such areas: Boston, Brockton, Springfield-Chicopee-Holyoke and Worcester.

In June total employment reached an all time high of 2,273,800 or 24,500 more jobs than in the previous month. At the same time, however, the work force increased still faster. The work force stood at 2,387,200 or a surplus of 38,900 over the previous month. As a result of these conditions the unemployment rate rose in June to 5.1% or half a percent higher than in May. The spectacular rise in the work force was due to the influx of students coming out of schools and entering the labor market.

During June and July there appears to have been a mid-summer pause in the expansion which had been running at full speed in April and May. The sharp increase in unemployment between June and July was due largely to traditional plant closings, particularly textiles, apparel or leather for the vacation season. Unemployment increased from 123,200 in June to 132,400 in July or from 5.1 to 5.5%. The situation was still more favorable than the year before when in July 1964, unemployment reached 135,500 or 5.8% of the work force.

The largest number of new jobs were created by non-manufacturing businesses, that is, such services as medical and educational facilities as well as research and development. Due to improvements in the textiles field, the Fall River area moved from class E to class D during June.

During the month of August the economic expansion of the Bay State regained its up-trend and the unemployment rate declined to 4.4%. The non-electrical machinery, transportation equipment, the electronic components and the industries working for aerospace projects provided a large part of the increment in factory employment. In the sector of soft goods, the apparel industry, leather and leather products and paper also increased over their previous levels of production and employment. The record was marred by the closing of one of the oldest paper mills in Massachusetts which was forced to close because of excessive costs of operation.

Investment in construction was also instrumental in boosting total employment during August. Another important factor working in the same direction should be mentioned—the additions of government employees. A number of youths were hired by state and local government to serve in various projects organized by the Neighborhood Youth Corps. Since January 1965 the employment by state and local government increased by 9,700.[4] During August alone the number of state and local government hirings jumped by 2,100.

Improvement in employment can be noted also from the decrease in the number of applicants for unemployment insurance benefits. In mid-August 1964 the number of insured unemployed who filed for total unemployment insurance benefits was over 51,100. At mid-August 1965 the same category of insured unemployed had declined to 40,800.[5]

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[4] Employment Newsletter of February and September, 1965. Published by the Division of Statistics, Department of Labor and Industries, the Commonwealth of Massachusetts.

[5] Massachusetts Trends in Employment and Unemployment, September, 1965.

This was good news for the Bay State economy if we also consider the fact that the work force over the same period of time increased from 2,354,500 to 2,394,900, an additional amount of 40,400. At the same time the total employment increased by 51,900 which clearly indicates the much better economic conditions at the end of the summer of 1965. The unemployment rate declined from 5.1% (August '64) to 4.5% (August '65).

During September business activity continued and the unemployment rate fell to 4.0% of the work force, the lowest rate in almost six years. The number of unemployed declined from 111,400 in September 1964 to 95,000 in September 1965. (See: Table 1) Further, we have to take into consideration the fact that during the month of September 1965 the work force decreased by 26,000 as compared with the previous month's figure. This decline represents the return of students to secondary schools and colleges. This highlights the importance of the problem of seasonal employment and unemployment in the Bay State during the summer.

In all but one of the major labor areas in the state, unemployment during September was 5.6% or less. The exception was Lowell with 6.3% unemployment. In the Boston area unemployment went down to 3.4% and in Worcester to 3.6%. The number of insured unemployed who claimed total unemployment benefits declined to 35,300 in September 1965. During 1964 at the same time their number stood at 46,100.[6] The expansion in manufacturing industries explains the decline in insured unemployment claims.

The strength of the economy of the Commonwealth was carried on during October 1965. Although there was little change in unemployment, total employment reached 2,275,100. It is interesting to note that manufacturing employment from September to October increased by 3,600, the first substantial increase in manufacturing employment in nine years.[7] The durable goods industries contributed 2,300 new jobs with all sectors except ordnance, stone, clay and glass and specialized industrial machinery participating. Electrical machinery was at the top in this surge for more employment in the hard goods industries. The nondurable goods sector moved also in the same direction with 1,300 new jobs. The larger increases occurred in printing, leather, footwear and miscellaneous manufacturing industries.

The number of state and local government employed increased by 2,100 from September to October 1965.

There are more and more visible signs that private education is becoming big business in Massachusetts. It was reported that at mid-October more than 81,000 were employed in such educational institutions.[8] And it should be stressed that this number does not include those employed in state and local educational institutions. From the point of view of employment, private education stands ahead of all of the manufacturing industries except electrical machinery. The payrolls in education have already outrun all of the non-factory industries excepting wholesale and retail trade and medical and other health services. In all probability capital spending in private education will continue to increase in the future.

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[6] Massachusetts Trends in Employment and Unemployment, October, 1965.

[7] Massachusetts Trends in Employment and Unemployment, Division of Employment Security, November, 1965, Vol. 1, No. 10.

[8] *Ibid.*

Unemployment declined in October to a record low of 91,100 or 3.8% of the work force. This low record of unemployment should be connected with the fact that the work force during the month of October continued to decline by 2,100, most students who worked during the summer having returned to their classrooms.

During November there was a seasonal decline in the total volume of employment due mostly to farm activities being restricted at this time of the year. On the other hand, non-agricultural employment increased to an all time record of 2,045,000—an additional 2,200 new jobs over the previous month.

The main sources for this new employment came from the group of durable goods industries where more labor was hired in electrical machinery, electronic components, communication and transportation equipment, primary metal industries and fabricated metals. In the nondurable goods industries there was no significant change in the aggregate volume of employment. In the paper, leather, footwear and miscellaneous manufacturing sector employment increased in November but at the same time in other soft goods industries like textiles, apparel, food and chemicals it declined so that in this sector as a whole total employment remained unchanged. In the rest of non-manufacturing business there was an increase in employment in trade, wholesale and retail, finance, insurance and real estate as well as in transportation and public utilities. A large part of this employment growth was offset by a seasonal decline in contract construction.

Unemployment in November rose to 99,500 or 4.2% of the work force but it should be remembered that this was the lowest rate for any November since 1959. We should note further that with this low rate of unemployment, the Bay State economy came very close to the national standard of 4.1% for November 1965. (See: Table 1)

Looking back over the year we find that our economy has performed well under the given conditions. Nationwide business expansion was shared by Massachusetts. The following table shows that with few exceptions (ordnance, apparel, chemicals and transportation) from November 1964 there was a general rise in employment in all major industries. Since November 1964 55,000 new non-agricultural jobs have been created. This increase in employment over the past 12 months was almost as big as the increase achieved during the preceding four years combined.

In the manufacturing industries employment since November 1964 has increased by some 19,000 jobs, the first such November increase in five years. The boost came from the sector of durable goods industries with a jump of over 14,000. The soft goods industries accounted for the rest. As an explanation for these increases, higher defense spending and capital investment were instrumental.

An even more spectacular rise in employment for the same period of time happened in the nonmanufacturing sector where services, trade and government employees are included. Since November 1964 about 36,000 more jobs have been created in this sector. The largest increases came from services, trade and state and local governments.

TABLE 3

NONAGRICULTURAL EMPLOYMENT BY MAJOR INDUSTRY DIVISIONS AND GROUPS

Major Industry Divisions and Groups	*Employment November 1965*[4]	*Amt. of change to current mo. from: November 1964*
Nonagricultural Total[1]	2,045.3	+54.8
Manufacturing Total	673.6	+19.0
Durable Goods	322.7	+14.2
Ordnance	13.5	— 1.1
Primary metal industries	22.5	+ 1.6
Fabricated metal products	40.0	+ 1.1
Machinery, except electrical	73.6	+ 1.9
Electrical machinery, equipment and supplies	88.7	+ 3.4
Transportation equipment	27.0	+ 4.9
Instruments, photographic, optical goods, watches, clocks	28.2	+ 1.0
All other durables[2]	29.2	+ 0.5
Nondurable Goods	350.9	+ 4.8
Food and kindred products	42.1	+ 0.3
Textile mill products	39.1	+ 0.7
Apparel and related products	57.4	— 0.3
Paper and paper products	36.4	+ 0.4
Printing and publishing	42.2	+ 1.3
Chemicals and allied products	17.6	— 0.4
Rubber and miscellaneous plastic products	37.2	+ 0.4
Leather and leather products	49.0	+ 0.2
All other nondurables[3]	29.9	+ 2.2
Nonmanufacturing Total	1,371.7	+35.8
Contract construction	95.5	+ 2.4
Transportation, communications, electric, gas, sanitary services	102.4	— 0.9
Wholesale and retail trade	419.5	+11.0
Finance, insurance, and real estate	106.8	+ 0.1
Services	363.3	+11.5
Government	284.2	+11.7

Source: The Commonwealth of Massachusetts, Division of Employment Security.

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[1] Source: Current Employment Series of U. S. Department of Labor, Bureau of Labor Statistics/Massachusetts Department of Labor and Industries as adjusted to Employment and Wage Data on Massachusetts Division of Employment Security.

[2] Includes lumber and wood products, furniture and fixtures, stone, clay and glass.

[3] Includes tobacco manufacturers, petroleum refining, miscellaneous manufacturing industries.

[4] Preliminary.

Looking at the major labor areas the situation over the same period of time appears as follows:

TABLE 4

AREA TRENDS IN WORK FORCE, EMPLOYMENT AND UNEMPLOYMENT

*Major Labor Areas**	*Area1 Class*	*November 1965*	*November 1964*
BOSTON	C		
Work Force		1,319,200	1,299,600
Total Employment		1,273,800	1,248,000
Unemployment		45,400	51,600
The Ratio		3.4	4.0
BROCKTON	C		
Work Force		55,800	54,000
Total Employment		52,900	51,100
Unemployment		2,900	4,500
The Ratio		6.3	8.5
FALL-RIVER	D		
Work Force		52,400	53,000
Total Employment		49,100	48,500
Unemployment		3,300	4,500
The Ratio		6.3	8.5
LAWRENCE-HAVERHILL	D		
Work Force		89,100	88,300
Total Employment		84,000	82,500
Unemployment		5,100	5,800
The Ratio		5.7	6.6

TABLE 4—Continued

AREA TRENDS IN WORK FORCE, EMPLOYMENT AND UNEMPLOYMENT

*Major Labor Areas**	*Area[1] Class*	*November 1965*	*November 1964*
LOWELL	D		
Work Force		57,900	57,600
Total Employment		54,400	53,100
Unemployment		3,500	4,500
The Ratio		6.0	7.8
NEW BEDFORD	D		
Work Force		62,900	62,400
Total Employment		59,200	51,100
Unemployment		3,700	4,300
The Ratio		5.9	6.9
SPRINGFIELD-CHICOPEE-HOLYOKE	C		
Work Force		210,800	209,800
Total Employment		201,200	198,300
Unemployment		9,600	11,500
The Ratio		4.6	5.5
WORCESTER	C		
Work Force		141,800	139,700
Total Employment		136,100	133,700
Unemployment		5,700	6,000
The Ratio		4.0	4.3

* Standard Metropolitan Statistical Areas (SMSA) as defined by the U. S. Bureau of the Budget. According to the U. S. Census of Population 1960, these areas account for almost 80 percent of the population of the Commonwealth.

[1] Explanation of Area Classification. A letter classification code is assigned to each major area. The unemployment rate is a key factor in determining the appropriate area classification, but it is not the sole criterion. Consideration is also given to the area's employment outlook, as reflected by local employer estimates of their manpower requirements, the relationship between labor supply and demand, the seasonal pattern of employment and unemployment fluctuations in the area, and several other factors.

Labor Supply Category	*Description*	*Unemployment as % of Work Force*
Group A	Overall Labor Shortage	Less than 1.5%
Group B	Low Unemployment	1.5 to 2.9%
Group C	Moderate Unemployment	3.0 to 5.9%
Group D	Substantial Unemployment	6.0 to 8.9%
Group E	Substantial Unemployment	9.0 to 11.9%
Group F	Substantial Unemployment	12.0 or more

Source: Massachusetts Trends in Employment and Unemployment, Research Dept., Division of Employment Security, February, 1965, Vol. No. 1.

Indeed, the problem ahead may very well not be unemployment but rather labor shortage. Occupational shortages have been announced for practically every industry. Professionl and technical personnel are especially in demand. Many companies now are faced with a shortage of skilled and semi-skilled workers. Metal workers, technicians and engineers in special fields are scarce. The labor supply is now short also in such semi-skilled professions as truck driving, wiring, soldering and shipbuilding. Women with qualifications to work on fine assembly are more in demand than ever. Finally, there is an evident lack in the supply of many clerical workers and in general personnel for service industries. The problem of training the unskilled still remains with us.

Public Works and Economic Development Act of 1965

This act passed by Congress in 1965 is concerned with public works and the economic development of areas which have been depressed in recent years. The Area Redevelopment Act expired on August 31, 1965 and similar assistance granted under that legislation has been taken over by the administration of the new act.

To be eligible for assistance under this act an area must have had at least a 6% unemployment rate.[1] If this condition is not present the area may still be included in this program if it has a median family income equal to 40% or less of the national average. The last category might include those areas which suffered a sudden, very large loss of jobs. The areas with substantial and persistent unemployment called "redevelopment areas" as of March 1, 1965 continue to be eligible until the first annual review which will be finished by June 30, 1966, even though their unemployment rate declines below 6% in the meantime.

A list of eligible areas in Massachusetts based on their high rate of unemployment in the past has been compiled by the Division of Employment Security. The following list consists of labor areas which the Secretary of Labor has reported as having had substantial unemployment during the preceding calendar year and may qualify for consideration under Title 1 of the Public Works and Economic Development Act: Brockton, Lawrence-Haverhill, Springfield-Chicopee-Holyoke, Fitchburg-Leominster, Milford, Pittsfield, Southbridge-Webster, Nantucket, Taunton, and Ware. These areas may be eligible *only* for Federal grants for public works and development facilities under the act.

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[1] Unemployment Criteria for assistance under the Public Works and Economic Development Act of 1965.

Title I—Areas of Substantial Unemployment.

A labor area to qualify under Title I of the Act for public works and development facility grants must have had substantial unemployment (6 percent or more of the work force) during the preceding calendar year, on the basis of average annual unemployment statistics.

Title II—Areas of Substantial and Persistent Unemployment.

A labor area may be eligible under Title II of the Act for public works and development facility loans where the Secretary of Labor finds that the current rate of unemployment is 6 percent or more, and the average annual rate of unemployment as a percent of the work force has been at least:

(a) 50 percent above the national average for three of the preceding four calendar years, or

(b) 75 percent above the national average for two of the preceding three calendar years, or

(c) 100 percent above the national average for one of the preceding two calendar years.

The following areas meet the criteria specified in Title IV, Section 401(a) of the act: Fall River, Lowell, New Bedford, Newburyport, North Adams, Bourne-Wareham, Gloucester, Plymouth, Provincetown, and Dukes County. These areas qualify essentially by reason of high and prolonged unemployment in accordance with the findings of the Secretary of Labor, low income, or because they were designated as redevelopment areas under the Area Redevlopment Act on or after March 1, 1965. These areas are potentially eligible for *all* types of Federal assistance under the act.

The change in the criteria for determining areas of persistent unemployment removed two major areas, Lowell and New Bedford, from the "persistent" group. However, their unemployment is still substantial (Group D). In the Appendix a complete list is attached with cities and towns in Massachusetts eligible to apply for assistance under the Public Works and Economic Development Act of 1965. (See: Table 47.)

LABOR RETRAINING PROGRAM

The purpose of the Manpower Development and Training Act, passed by Congress in 1962, was to help those who were unemployed and without a skill. Massachusetts embarked on such a labor retraining program in December 1962.

The State Division of Employment Security was entrusted with the responsibility of devising and implementing a plan for finding out who needed retraining and what kind of jobs were available and suitable to these trainees. The Commonwealth was divided into 22 Manpower Development Training Areas.

The beginning of this operation was difficult because a number of problems were raised. What was needed first was a skill survey in each of the 22 areas. But at the time only two formal skill surveys were available—one in North Adams and the other in Worcester. From the estimated 126,700 unemployed in Massachusetts in December 1962 only 70,700 unemployed were in the category of insured workers. As to the skills of the uninsured, no definite information was available.[9]

The act, in part, was concerned with the problem of school dropouts, but there was no way of finding out what number of these dropouts came from homes of unemployed parents. If that information could have been supplied, then the emphasis might have been directed to discovering a job or developing a skill for the parents, thus indirectly giving a chance to the dropouts to return and finish school

Another difficult problem was securing reliable information about the kind of jobs that were or would be available in the respective area. It was necessary to give the trainees some assurance that after they completed the program they would find a job. It is a difficult task to canvass in detail the potential demand for labor in a given area. Prospective employers often are not willing to supply information about their plans for expansion or contraction or for manpower build-up. Under these circumstances the Division of Employment Security faced a difficult time in deciding what kinds of courses should be offered to the enrolled.

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[9] *Boston Herald,* February 18, 1963.

Finally the problem of finding the right teachers for such programs had to be solved. Nevertheless, the Division of Employment has been able to put this program in action. MDTA enrollment had reached 7,000 persons by the end of the first quarter in 1965. Over 2,500 men and women had graduated in the courses offered to train them in a skill for which there was some evidence of future demand.[10]

The Manpower Development and Training Act has now been amended and it will be in effect until June 30, 1969. The financing of the program has also been changed so as to increase the proportion of federal support.

In order to collect empirical information about the application and the success of this program the Division of Employment Security has conducted a survey "Retraining in Massachusetts" covering the period from December 1962 through May 31, 1964. It is interesting to note some of the findings of this survey.[11]

From 2,108 enrollees (men and women) over the mentioned period of time 1,306, that is 62% successfully finished their courses. About 850 found a job shortly after graduation. Further, of these 9 out of 10 were hired for an occupation which was directly connected with what they were trained for. Men were predominant among those enrolled: 75% men and 25% women.

The majority was composed of young adults with two-thirds between 22 and 44 years. Only 12% were below the age of 22. About their education one cannot say that they came from educationally deprived areas or groups. 56% were high school graduates or better and an additional 33% had attended some high school.

Courses offered for women centered in clerical and sales skills. Preparations for licensed practical nurse, nurse's aide and flower arranger were also available. For men courses were given in the following occupations: semi-skilled metal working, machine operating specialties, auto mechanics, auto repairman, arborist, cook, baker, meat-cutter, electronic technician and help in fisheries.

Compared with national averages, the trainees in Massachusetts were relatively older than in the rest of the country. In the country as a whole the trainees of 45 years of age or older numbered 10% whereas in the Bay State they constituted 20.1% of the trainees. Another interesting comparison is related to the number of years employed before entering this program. The trainees who had 10 years of steady employment before enrolling in the retraining program were 40.1% in Massachusetts as against 28.8% in the nation.

5. Transportation and the Port of Boston

Among the factors which tend to handicap the future economic growth of Massachusetts are various weaknesses in its transportation system and the Port of Boston. Some progress was made in 1965 toward correcting these weaknesses, but much remains to be done in 1966 and in subsequent years. A brief recital of the main problems and an outline of possible corrective actions follows.

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[10] Trends in Employment and Unemployment, April, 1965.

[11] Retraining in Massachusetts Under the Manpower Development and Training Act, Commonwealth of Massachusetts, Division of Employment Security (1965).

THE TRANSPORTATION SYSTEM: RAIL SERVICE

For many years Massachusetts has suffered by virtue of the fact that it was served by a network of relatively weak, terminal-like railroads. The New Haven and the Boston and Maine have been confronted with various financial crises for over forty years while the Boston and Albany has long been treated, as in fact it was, as a comparatively weak branch line of the New York Central System. All three roads were subject to intense highway competition by both common and private carriers; all (but especially the New Haven and Boston and Maine) were saddled with extensive passenger operations which, as time went on, generated increasing deficits. As the profitability of the freight service dwindled, these losses, whether from commuter or through passenger service, could no longer be tolerated. The New Haven entered bankruptcy in 1962; the Boston and Maine survived a formidable refunding problem in 1964-65 by virtue of rigid economies, a skillfully drawn financial plan and the patience of its creditors. Passenger service on the Boston and Albany has been sharply curtailed.

It now appears that the New Haven and the Boston and Maine are about to pass from the scene as independent entities. The New Haven is slated to become a part of the Penn-Central system, the principal remaining issue being the future of its through passenger service. The Boston and Maine seeks to be included in the Norfolk and Western-Nickle Plate system, since it appears that it probably cannot survive as an independent unit once the Penn-Central merger, together with its acquisition of the New Haven, takes place. The Boston and Maine has long been dependent on the Pennsylvania for a considerable volume of connecting traffic (handled over the lines of the Delaware and Hudson and interchanged at Mechanicsville, N. Y.). Following the Penn-Central merger and the acquisition of the New Haven, it is logical to suppose that Penn-Central will try to route some of this traffic over its own lines. Thus the Boston and Maine will be forced to seek other sources of connecting traffic, presumably through some linkage of the Norfolk and Western-Nickle Plate, Erie-Lackawanna and Delaware and Hudson. The key issue appears to be the price or terms and conditions of such an amalgam.

The demise of the New Haven and Boston and Maine as independent units means that the main railroad arteries in Massachusetts, and indeed in all of southern New England, will be controlled by out-of-state and out-of-New England carriers that have their primary interest and orientation focused on terminal cities other than Boston. In fact, this change in control will probably make comparatively little difference since both the New Haven and the Boston and Maine have for many years been heavily dependent on connecting traffic controlled by "foreign" roads. The improved financial strength of the merged carriers, the ability to offer better equipment and additional through service and to handle rate and service questions within a single organization will almost certainly off-set the somewhat ephemeral disadvantages of "foreign" control. Nevertheless, the mergers will mean that the Commonwealth and the Massachusetts Port Authority will have to be far more alert and far more effective, than in the past in identifying, and fighting against rates or practices which might be disadvantageous to Massachusetts including the Port of Boston. In the past, the Commonwealth has been able to rely on the two railroads to call such rates and practices to the attention of the authorities. This "watch dog" role must now be performed, in large part, by the State and the Port Authority.

While the merger of the New Haven into the Penn-Central and of the Boston and Maine into the Norfolk and Western may not be the best theoretical solution to the Commonwealth's railroad problem, it is almost certainly the only practical solution which presents itself at this time.

During 1965, the Massachusetts Bay Transportation Authority entered into arrangement with both the Boston and Maine and the New Haven for the operation of rail commuter service within the greater Boston area. While only an interim solution (until 1968) there is at least the prospect that the arrangement can be continued beyond that date until other means of providing rapid commutation can be found. Boston, and the MBTA, can be congratulated for having established one of the first operating systems of integrated urban mass transportation in the country. It is a trend which is sweeping other cities of the country, but few, if any, have carried the implementation or integration so far.

The question of through rail passenger service between the Commonwealth and other states has been "solved" in part by the extensive abandonment of service by the Boston and Maine, and by pending "train-off" cases for almost all of its remaining passenger trains in Massachusetts. Light traffic loads and highway competition have made through passenger service in northern New England uneconomic.

The question of through passenger service on the New Haven, essentially on the Shore Line and on the Springfield- New Haven line presents a rather different problem. The trustees of the New Haven have pending a petition to abandon all such service. At the same time they have entered into an interim agreement with the Commonwealth and the states of Rhode Island and Connecticut to operate all through Shore Line and Springfield trains, regardless of the outcome of the abandonment case, until June 1966 on payment of a subsidy. The Massachusetts share of the subsidy is $250,000. The agreement is extendable to December 1966. Legislation authorizing the payment of this subsidy passed the General Court in the closing days of 1965.

Representatives of the Governor's Office, including a member of this Board, have held discussions with officials of the Penn-Central as to the operation of essential passenger service after acquisition of the New Haven. It seems entirely likely that some arrangement can be worked out whereby the railroad will operate for its own account a minimum volume of passenger service and that the states concerned, including the Commonwealth, will be able to purchase or subsidize such additional service as they desire. In the meantime, the Commonwealth is protesting the abandonment petition of the New Haven on the grounds that both on the Shore Line and Springfield line there is a substantial public need for the service as evidenced by a large number of riders. (During a sample week in May 1965, weekday arrivals and departures on Shore Line trains in Boston exceeded 1,200 daily in each direction with over 300 arriving and departing Springfield. Weekend loads were even higher.) With this volume of traffic, the public convenience and necessity require the continuation of some level of passenger service along these routes, although not necessarily the current quantum. And the traffic volume appears to make a non-loss operation feasible.

AIR TRANSPORTATION

1965 saw the takeover of Northeast Airlines by the Storer Broadcasting Co. The company has ordered new equipment for both its short-haul routes and its temporary Florida route. The prospects now seem excellent that the CAB will renew and make permanent Northeast's routes south of New York, including that to Florida and to the important intermediate points of Philadelphia and Washington. With this accomplished and with a return to profitable operations which seem probable in 1966, the Commonwealth has every right to expect and demand a substantially improved level of service over that which Northeast has been able to provide in recent years. This applies especially to service between Boston and points in northern New England and between Worcester, New Bedford and the Cape and Islands on the one hand and New York on the other.

A revitalized Northeast is important to Massachusetts not only as a means of transportation but as an employer. It is encouraging that the Storer interests have indicated that they intend to leave the headquarters and main maintenance facilities of Northeast in Boston.

Legislation was introduced during the year which, if passed, would prevent the development of Logan International Airport as a full-fledged international jet facility. Obviously such legislation would constitute a serious handicap to Boston in its efforts to develop fully its air transportation potential.

During the year air freight handled at Logan increased at a rapid pace and there was considerable investment in new cargo-handling facilities. All of this promises a favorable future for Boston as a major air freight terminal.

MOTOR CARRIERS

New England and Massachusetts have an extensive network of local, regional and long-haul motor carriers, which on the whole, provide excellent service particularly within New England and to the middle Atlantic states. Competition in the industry is, however, intense and many of the local and regional carriers show little, if any, profit. Because of the importance of these carriers to the economy of the Commonwealth it is important that their financial soundness not be allowed to be undermined. A study might well be undertaken during 1966 to determine what might be done to assure the continued health and viability of these carriers.

PORT OF BOSTON

One of the main natural resources which the Commonwealth possesses is the Port of Boston. Yet over many years the Port has been allowed to decline in relative importance and few realistic efforts have been made to place it in a position of leadership in either the coast-wise, inter-coastal or international trades. The reasons why this is so are complex. The subject has been studied to the point where there is now a considerable library on the Port of Boston and its problems, extending over many years. In part, the problems are not susceptible of correction by any single group within the Commonwealth or even by a combination of groups; they are problems of freight rate differentials, out-of-state ownership and management and the like. But to a major degree the problems of the Port of Boston can be traced to factors within the Commonwealth itself. It can only be concluded that in the past the government, the business community and labor have not thought it worthwhile to make the necessary effort to correct these shortcomings so that Boston might occupy its rightful place among the northeast ports.

In 1965 the Massachusetts Port Authority, which since 1956 has been the principal agency responsible for the port and its development, appointed a Port Development Director whose primary duty is to stimulate the growth of traffic through the port and to place it in a competitive position vis à vis other northeast ports. On the whole, the Board is encouraged by the plans which the new director is beginning to evolve for the revitalization of the port and for rebuilding its tonnage. On the other hand, it must be recognized that these plans are still in a formative stage and that a great deal of implementation remains before it can be said that the Commonwealth has an effective program for the Port of Boston. If the present plans or any other plans are to be effective, it is perfectly clear that the wholehearted and unstinting support of the government, the business community and labor must be behind the Port. If this is not the case, the Port will continue to be a third class port with a static or slowly but steadily diminishing volume of general cargo tonnage.

This suggests to the Board that a major task of the Port Authority is to make it perfectly clear to government officials, to business men and to labor why a revitalized port is so important to the Commonwealth. This task was really never accomplished, and we are not sure that the present plans of the Massachusetts Port Authority contemplate sufficient effort in this direction. Briefly stated the reason for having a port is economic. It is sometimes suggested that a ton of general cargo handled through a port adds approximately $15 to the economy of a port city and that a ton of bulk cargo adds approximately $2.50. Thus, even at today's modest tonnage levels the Port of Boston can be thought of as adding some $60 million to the economy of greater Boston. If the port could be brought up to its full potential, this contribution could be many times this amount, reflecting itself in increased jobs, investment and taxes.

But the direct and indirect stimulus that a revitalized port might bring to the Commonwealth cannot be measured in these terms alone. At present Massachusetts exporters and importers in many cases must ship or receive goods through New York. In this manner their costs are higher than competitive firms in the New York area or in areas adjacent to other northeastern ports. Thus it is apparent that there is a double-barreled reason for encouraging a revitalization of the Port of Boston.

It may be noted that there has been a largely static or downward drift in general cargo, especially in the export trade, although the declines have never been so precipitous as to stimulate corrective action. These trends are in marked contrast to those that have applied at Philadelphia, Baltimore, the Hampton Roads ports and New York. By and large each of these other ports has shown a steady increase in general or bulk tonnage or both. There is no great mystery about the factors which have caused the current situation in Boston's tonnage. Poor service and high costs are the interlocking causes.

Boston is a high cost port for operators to serve. The high costs occur primarily in the area of the charges for loading or discharging a unit of cargo, a cost which must be borne by the steamship operator since ocean rates from or to all of the northeast ports tend to be equal. As a result, operators are reluctant to serve the Port of Boston and do not do so if they can help it. To the extent that service is provided, Boston is typically a port of call on the inward voyage only so that imports receive relatively more favorable service. Exports, if loaded at Boston, tend to travel to the other northeast ports on the ship before making New York a last port of call on the outward voyage.

The revitalization of the Port of Boston will require, among other things, substantial changes in work rules and practices among longshoremen, clerical and custodial labor. We are encouraged by the new contract entered into early in 1966 between the Boston Shipping Association and the Longshoremen making extensive changes in work rules and practices. But only through such changes is there a possibility of securing the reduced unit handling costs which will be necessary to make Boston an attractive port to serve.

Included in the tentative plans of the Massachusetts Port Authority is a substantial program of capital improvements for the various piers involved. It is the position of the Authority that most other northeast port cities give various forms of assistance in making such capital improvements. Whether the Commonwealth should give serious consideration to giving assistance to the Port Authority in making such improvements, in what amounts, and in what form, depends heavily upon the development of a successful plan for the future of the port which gives promise of widespread support. There is little point in investing in a "dead" or dying port and that is essentially what the Port of Boston is today.

Toward the end of 1965, the Boston and Maine Railroad indicated that it intended to give up its operating leases for certain port properties (notably Hoosac Pier) and to withdraw the free loading provision in its tariff. The Boston and Albany followed suit with respect to its tariff. The reasons given for these actions were the heavy losses which the B & M was incurring in the terminal operation and which both roads were incurring in the handling of all cargo on the piers. The Authority has taken over the operation of Hoosac terminal and has already effected some savings in labor costs. Nevertheless, these changed tariff provisions will undoubtedly divert some tonnage to other ports and these events must be counted as adverse to the Port of Boston. They only serve to highlight the need for radical change and an over-all plan for the revitalization of the Port of Boston into a valuable asset of the Commonwealth's economy.

6. Massachusetts Defense Industries

The ability of the Commonwealth to satisfy the needs of the Department of Defense in supplying the engineering and the developmental talent to seek out highly complex weapons systems has elevated the state into a prominent position in terms of production of military goods and services. The special capabilities required in producing new weapons systems has not only enabled the state to secure substantial contract awards but more important it provides an enduring advantage in future Defense Department needs. This advantage leaves Massachusetts in a favorable position in competing for her share of the budget. Successful research and development is sometimes referred to as the "seedcorn" for follow-on production contracts which in turn may create more refined or sophisticated research and development potential.[1]

The role played by the defense industries in the state can best be illustrated through the use of available quantitative data.

TABLE 1

NET VALUE OF MILITARY PROCUREMENT ACTIONS
FOR MASSACHUSETTS AND THE U. S.
(millions of dollars)

Fiscal Year	*U. S.*	*Mass.*	*Mass. as a % of U. S.*
1960	22,462.2	1,070.4	5.2
1961	24,304.7	1,072.4	4.8
1962	27,800.4	1,310.0	5.2
1963	28,107.9	1,032.1	4.2
1964	27,470.4	1,060.2	4.2
1965	26,631.1	1,178.7	5.1

The net value of military procurement action for the state has consistently averaged over one billion dollars since 1960 with a peak being reached in 1962. The state has captured approximately 4-5% of total procurement awards in the United States.

It should also be noted that although total procurement action fluctuated between 22.4 and 23.1 billion dollars, the share awarded to Massachusetts remained comparatively stable and more recently recorded a significant plus factor going from fiscal 1964-1965. The essence of the above table would tend to demonstrate the state's ability to "hold its own."

It was mentioned earlier that because of the state's educational, scientific, and research organizations its ability to compete for the "defense dollar" is distinctly enhanced. The table below presents that portion of procurement funds earmarked for research and development.

TABLE 2

NET VALUE OF MILITARY PRIME CONTRACT AWARD FOR
EXPERIMENTAL, DEVELOPMENTAL, TEST, AND
RESEARCH WORK FOR THE U. S. AND MASSACHUSETTS
(millions of dollars)

Fiscal Year	*U. S.*	*Mass.*	*Mass. as a % of U. S.*
1960	5,521.4	397.5	7.20
1961	6,027.5	348.5	5.78
1962	6,113.1	362.0	5.92
1963	6,198.9	365.0	5.90
1964	5,764.9	409.0	7.10

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[1] *The Changing Pattern of Defense Procurement,* Department of Defense.

Although figures beyond fiscal 1964 are not available, Massachusetts has displayed its ability over a five year period to *at least* maintain a reasonable share of the R & D dollar. It is generally agreed that military procurement action will continue to demand highly complex and sophisticated weapons systems. This, in turn, makes for greater research and development funds and therefore a favorable competitive advantage for the state.

EMPLOYMENT

One of the better indicators in judging the defense impact on Massachusetts is to analyze the influence of the value of production on employment in industries which are primarily defense-oriented. It should be noted however, that defense employment is created by "outside demand" or, as is more commonly known, by "export demand." This "outside demand" (defense spending) not only provides substantial employment in the state but also supplies the impetus for constant or increasing expenditures for goods and services for local consumption within the state. Consequently, increases or decreases in defense expenditures will not only affect employment within defense-oriented industries but will also significantly affect those industries engaged in the production of goods and services within Massachusetts for local consumption. A look at the employment trend is new in order (See: Table 3).

One begins to truly show the magnitude of employment in defense-oriented industries when one considers that in June of 1965, 16.6 percent of total manufacturing employment were engaged in defense work. This percentage excludes those people employed in research and development and testing firms. Also those employed by non-profit institutions working on defense related activities are also excluded. Estimates of people working on defense related activities for non-profit institutions range from 3,000 to 5,000.

After reaching an employment peak in 1962, the state felt the impact of decreasing defense orders from 1962-1964. In this time period employment fell by about 23.7% although research and development continued to rise. After reaching a low in 1964, defense employment regained some of its losses in 1965. As demonstrated in an earlier table, fiscal 1965 shows a good improvement over fiscal 1964 in terms of procurement actions. The effect of this improvement in contract awards speaks well for the state in the next 12 months, since in defense oriented industries contract awards are closely tied to employment 6 to 12 months later. That is to say, the employment aspect of awards is felt about a year later.[2]

Casting a favorable light on the state is the planned expansion in space research and technology under the direction of the National Aeronautics and Space Administration. The location of the NASA Space Center in Cambridge provides a sound base for continued expansion in electronics and communications. Although up to this time total contract awards by NASA to Massachusetts have been disappointingly small, nevertheless, the Space Center should afford the state a good opportunity to participate more actively.

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[2] Federal Reserve Bank of Boston, *New England Business Review, 1965.* New England and the Impact of Defense Orders.

TABLE 3

EMPLOYMENT IN DEFENSE INDUSTRIES IN MASSACHUSETTS
(in thousands)

Industry Group	*1960*	*1961*	*1962*	*1963*	*1964*	*1965*
Ordnance	18.2	20.8	23.5	18.6	15.3	13.3
Electrical Machinery:[1]						
Elec. Transmission & Distribution Equipment	10.5	15.5	14.6	14.3	14.7	14.8
Elec. Industrial Apparatus	5.9	6.1	6.0	5.3	5.6	5.7
Communication Equipment	25.9	27.2	31.7	27.3	24.4	25.3
Elec. Components & Accessories	33.9	30.5	27.9	25.4	22.8	24.3
Miscellaneous Elec. Machinery Equipment & Supplies	3.8	3.8	3.2	3.5	3.2	2.5
SUB-TOTAL ELEC. MACHINERY	80.0	83.1	83.4	75.8	70.7	72.6
Shipbuilding	13.3	10.2	8.0	5.0	5.4	7.4
Aircraft & Parts	3.3**	9.2	9.5	9.1	8.8	9.5
Motor Vehicles & Components	4.7	5.2	5.3	5.3	5.4	7.2
SUB-TOTAL TRANS. EQUIPMENT	21.3	24.6	22.4	19.8	19.6	24.1
SUB-TOTAL MANUFACTURING	119.5	128.5	129.3	109.9	105.6	110.0
Research, Development Firms and Testing Labs	20.9	26.0	28.5	31.4	32.4	34.5

[1] Includes only Electrical Distribution.

* Figure for 1965 is for the month of June, 1965.

** Labor dispute.

Source: Commonwealth of Massachusetts, Division of Employment Security.

TABLE 4

NASA CONTRACTS AND DIRECT AWARDS IN U. S. AND MASSACHUSETTS
(millions of dollars)

Fiscal Years 1963-1965

Fiscal Year	*U. S.*	*Mass.*	*Mass. as a % of U. S.*
1963	2,181.4	43.5	2.0
1964	3.490.2	78.6	2.3
1965	4,103.4	62.3	1.6

Source: Figures compiled through the Office of the Honorable Leverett Saltonstall, U. S. S.

CONCLUSION

As depicted earlier, the state has a large stake in defense expenditures. Employment in defense-oriented industries over the next twelve months will continue its moderate rise. However, the state's greatest asset in this field is its "availability of highly specialized, engineering and technical manpower" and its proximity to the centers of education and learning. This advantage is not possessed by the majority of the states in our country. This last fact will enable Massachusetts to effectively compete for the "defense dollar" and maintain or increase its share of contract awards.

7. The Construction Industry

Long regarded as an important barometer of economic activity is the construction business. It is big in size, diverse in structure and of great importance to the economy of the nation and the state.[1]

It is worth mentioning briefly that growth within the construction industry is sparked not by the industry itself but by external forces. For example, the formation of new households will usually coincide with housing starts, decisions made by the state's business managers to build, expand or modernize existing facilities will affect construction activity. In the same manner, decisions made by the community to build schools and hospitals and by government officials to build highways or missile bases stimulate construction activity.[2] Basically then growth within the construction industry is spawned by decision making people from three walks of life; the heads of households, business leaders, and officials of local, state and federal governments.

A look at the Commonwealth's construction business, using construction contracts awarded, indicates the following:

CONSTRUCTION CONTRACTS
TYPE OF CONSTRUCTION
1960-1964
(in thousands of dollars)

Type	*1960*	*1961*	*1962*	*1963*	*1964*
Non-Residential	317,711	329,497	392,683	480,548	442,062
Residential	334,892	354,862	399,025	411,156	511,962
Non-Building Constr...	111,840	114,990	319,802	176,720	129,351
Total	764,443	799,349	1,111,150	1,068,424	1,083,375

Source: F. W. Dodge Corp. Dodge Construction Statistics, Construction Contracts Bulletins, 1960-1964.

It is clear that the Massachusetts construction industry has shown reasonable growth over the past five years (1960-1964), a 42 percent increase. Although the contract award figures included increased labor costs (material prices have remained relatively stable) there is no doubt that there has been real and basically sound growth in total contract awards. 1965 continued this growth. For the ten months ending October contract awards totaled $928,413,000 versus $907,756,000 for the like period in 1964.

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[1] Business in Brief, No. 59, November-December, 1964. The Chase Manhattan Bank of New York.

[2] *Ibid.*

Although basic construction types have shown considerable increases, residential building appears to show more constant growth than the other types. For 1960-1964 the percentage change is 53 percent for residential building and 39 percent for non-residential building. Non-building construction, while reaching a peak in 1962, has remained relatively stable in the time period involved.

It may be noted that residential construction is spurred mostly by the rate of family formation and the volume of demolition of existing structures. In Massachusetts the increasing exodus of families from the larger cities to the suburbs is one of the factors influencing the increase in one and two family houses. The state has also experienced significant growth in apartment buildings due in no small way to the trend in urban renewal which seems to emphasize removal of run-down structures and consequently paves the way for high rise apartment buildings.[3]

As mentioned above the growth of the non-residential construction is based upon the carefully conceived decisions of the state's business managers. Their decisions are in turn based upon the general business outlook. The contract award figures indicate that Massachusetts has experienced a significant rise in the business demand sector of the industry. An indicator that this trend will continue is the state's rate of unemployment. In October of this year, the unemployment rate stood at 3.8%, the lowest rate since 1957. The favorable unemployment rate can be interpreted as "record total output and near-capacity operations." It means rising capital expenditures, personal income and retail sales which in turn create confidence in the business community. It is this business confidence which will lend itself to greater business demands upon the construction industry in 1966.[4]

Of no small importance to construction is the non-building sector of the industry which embraces everything from highways to military construction. Contracts awarded in the Commonwealth for the first ten months of 1965 were approximately 60% greater than the first ten months of 1964 (163.3 vs. 99.7 million). Despite the deferral of most military construction due to the Vietnam war, continued growth in this area seems probable due to two federal state highway programs, the ABC (a matching grant program that provides funds for primary and secondary roads) and the Interstate Highway system.[5]

While contract awards have shown substantial increases employment in the industry has also risen. The employment figure reveals a percentage change of about 16 percent from 1960 to October 1965. If one compares the ten month period of 1965 to the ten month period of 1964, the rising employment trend in construction is continuing. The average annual employment figure in October 1964 was 85.5 thousand versus 90.0 thousand in 1965, a percent gain of 7.4. The table below demonstrates the continuing rising trend in construction employment.

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[3] F. W. Dodge, Construction Outlook for 1966.

[4] *Ibid.*

[5] Op. Cit., Chase Manhattan Bank.

AVERAGE ANNUAL EMPLOYMENT
CONSTRUCTION INDUSTRY
1960-1964
(in thousands)

1960	78.2
1961	77.7
1962	79.7
1963	81.4
1964	85.5

Source: Commonwealth of Massachusetts, Department of Labor and Industries.

A discussion of the construction industry must of necessity embrace the role played by the Federal Government. Legislation passed in Washington within the last two years is presently having, and for years to come will have, a profound effect on construction activity in Massachusetts. First of all, the 1965 Housing Act with its provision of rent supplements could easily trigger a substantial amount spent in the area of housebuilding. Educational buildings are also getting solid support from Washington. This sector of the industry is witnessing remarkable growth aided in no small way by 1) 1963 Higher Education Facilities Act, 2) the Elementary and Secondary Education Act and 3) the Higher Education Act of 1965. The provisions of all of the acts will lend themselves to the building of classrooms, dormitories, laboratories and the like. The potential in hospital building is enormous. The enactment of Medicare will seriously tax existing medical and nursing facilities paving the way towards building expansion in this field. As previously noted, highway construction is also stimulated by the Federal Government.

In summation, then, with various surveys predicting moderate or sustained increases in the capital expenditure plans of business firms and with federal legislation providing a further stimulus in various sectors of construction, the state should experience continued growth in this important sector of its economy.

8. Income, Income Sources and Interstate Shifts

Massachusetts is a high income state compared with the rest of the country. During 1964 per capita income in the Bay State reached $2,965 while the national average was $2,566. The New England area as a whole had a per capita income of $2,866.

Among the ten states in the nation with the highest per capita income, Massachusetts occupies 9th place, as indicated by the following table:

PER CAPITA INCOME IN A GROUP OF
SELECTED STATES

Delaware	$3,460	California	$3,103
Connecticut	$3,281	Illinois	$3,041
Nevada	$3,248	New Jersey	$3,005
New York	$3,162	Massachusetts	$2,965
Alaska	$3,116	Maryland	$2,867

Source: Survey of Current Business, July, 1965, p. 11.

In terms of income expressed in current dollars one might say that significant progress had taken place considering that in 1929 per capita income in Massachusetts was $913. It declined to $784 in 1940 and rose again in 1950 to $1,664 and reached $2,511 in 1960. But if we use stable dollars, for instance 1929—or 1939—dollars, then the picture of real income over the same period of times shows a more modest growth.[1]

It is interesting to remember that in 1929 the per capita income in the Bay State was about 30% higher than the national average which stood at $703. By 1964 the differential between our State and the national average declined to around 15%, which means that Massachusetts is losing her position in the distribution of national income. This is true since the total personal income of the Commonwealth expressed in percentage of the national aggregate, slipped from 4.51% in 1929 to 3.23% in 1963. The whole New England area has suffered a similar drop in the share of the national income by declining from 8.32% in 1929 to 6.44% in 1963. This is a part of a significant change in the regional distribution of income during recent decades.

Since the 1930's an important trend in the geographic distribution of income in our country has been detected by statistical analysis.[2] It was observed that a shift of income share from the North and East to the South and West is taking place. The magnitude of this shift is too great to be ignored. Between 1948 and 1964 due to this regional shift, about $22 billion in individual income has been added to the South and West. In relative terms this was a loss to the North and East "had all the sections of the country grown at the same rate." The following table gives empirical evidence of how this phenomenon developed over the last decades.

REGIONAL DISTRIBUTION OF TOTAL PERSONAL INCOME
Percent of U. S. Total

	1929	*1940*	*1948*	*1963*
New England and Mideast	40	39	33	31
Plains and Great Lakes	33	31	32	29
Southeast, Southwest, Rocky Mts. and Far West	27	30	35	40

Source: U. S. Department of Commerce, Office of Business Economics Survey of Current Business, April, 1964, p. 15.

A more complete picture can be seen in the graphs attached which show the regional trends in total personal income between 1929 and 1963. (See pages 62 and 63.)

The explanation of this geographic shift in the distribution of income has been suggested to be the result of the following four factors:

(1) *The "industry-mix" or the compositional effect.* There are individual industries which are expanding more or less rapidly than the national all-industry growth. Thus we have fast and slow growing indus-

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[1] U. S. Dept. of Commerce started to provide data on "Disposable Income by States in current and constant prices," using as a base, the 1954 dollar. This may show the depreciation of the dollar but only since 1954.

Survey of current business, April, 1965, article with the same title.

[2] *Factors Underlying Changes in the Geographic Distribution of Income.* Robert E. Graham, Jr., Survey of Current Business, April, 1964.

tries. Agriculture, for instance, is considered to be a slow growing industry. Its effect on differential income growth is negative even though in absolute terms agriculture contributes to the total income of a given area. The industry-mix measure is the difference between the growth rate of an industry in a particular location and the all-industry national standard or the national growth. It is understood that a fast growing industry will generate more income, and therefore, it represents an additional boost to the development of a given area. The South and West seem to have concentrated on this type of industry in recent decades.

(2) *The regional industry-share.* This refers to the comparison between the percentage change of an industry located in a certain area and the percentage change of the same kind of industry at the national level. It may happen that an industry is growing faster (or slower) in a certain area than its counterpart nationally. The performance of this industry will relatively add to (or subtract from) the overall growth of the area. Thus, we have differential changes produced by regional shifts within national industries. Many industries in the South and West are enjoying a positive differential change in the regional industry-share.

(3) Over the same period of time a population movement has been observed, namely to the Southwest and West. This has been interpreted as partly a cause of the geographic shift in the distribution of personal income.

(4) Since the 1930's our social and fiscal policies have been directed at more equalization in the distribution of income on a national scale, and thus another trend toward diminishing regional differences in per capita income.

What is the position of Massachusetts in regard to the industry-mix and the regional-share as compared with the other New England states? The following table shows that although we have a relatively good industry-mix, we are defficient in the regional share.

COMPONENTS OF CHANGE IN INCOME FROM PARTICIPATION IN CURRENT PRODUCTION, 1948-1962
Total Participation Income
(in 1,000,000 dollars)

	Changes due to *National growth*	*Industry-mix*	*Regional-share*	*Total Change*	*Net Relative Change*
United States	173,667	——	——	173,667	——
New England	11,182	1,122	—1,702	10,602	—580
Massachusetts	5,644	749	—1,200	5,193	—451
Connecticut	2,823	537	— 23	3,337	514
New Hampshire	534	— 32	54	556	23
Maine	884	—104	— 190	590	—294
Vermont	342	— 36	— 47	259	— 83
Rhode Island	955	8	— 296	667	—289

Source: Survey of Current Business, April, 1964, p. 24.

The relatively favorable position of Massachusetts with the industry-mix is due largely to the fact that we do not have much agriculture. In absolute terms Connecticut comes next. If we follow a further breakdown of income change due to industry-mix effects between 1948-62 we find a number of industries in Massachusetts with a below-average growth rate. The following table indicates these industries which we should study carefully because slow-growing companies are included.

INDUSTRIES IN MASSACHUSETTS WITH BELOW-AVERAGE RATE OF GROWTH

(in 1,000,000 dollars)

Mining payrolls
(Less than $500,000 are not included.)

Manufacturing payrolls		*Participation Income*	
Food	— 30	Agriculture	—119
Textiles	—364	Transportation	—101
Apparel	— 55	Trade	—183
Lumber and Furniture	— 30	*Other*	— 51
Petroleum refining	— 5		
Leather	—110		
Motor vehicles and equipment	— 1		

In the next table we can see the fast-growing industries in the Bay State.

INDUSTRIES IN MASSACHUSETTS WITH ABOVE-AVERAGE RATE OF GROWTH

(in 1,000,000 dollars)

Non-metallic mining payrolls	1		
Manufacturing payrolls		*Participation Income*	
Paper	43	Construction	83
Printing	18	Communication and Public Utilities	54
Chemicals	32	Service	321
Rubber	12	Finance	243
Stone, Clay and Glass	2		
Ordnance, primary and fabricated metals	22		
Instruments and misc.	32		
Electrical Machinery	270		
Non-automotive transportation equipment	60		

Source: Survey of Current Business, April, 1964, pp. 26-27.

The most serious problem is, however, in the consideration of the regional-share effects. Here we can actually see how good the performance of our individual industries is compared with the same industries at the national level. The next table shows the dimension of this problem.

Industrial Breakdown of Income Change in Massachusetts Due to Regional-Share Effects
(in 1,000,000 dollars)

Mining payrolls	
Crude Petroleum	1
(Other items not included being less than $500,000.)	
Manufacturing payrolls	
Food	— 28
Textiles	—181
Apparel	19
Lumber and Furniture	— 5
Petroleum refining	— 4
Leather	— 31
Motor vehicles and equipment	10
Machinery, except electrical	— 27
Paper	— 48
Print	— 14
Chemicals	— 31
Rubber	— 31
Stone, Clay and Glass	— 7
Ordnance, primary and fabricated metals	— 34
Instruments and misc.	— 66
Electrical machinery	—122
Non-automotive transportation equipment	16

Participation Income	
Agriculture	— 27
Transportation	— 16
Trade	—172
Construction	— 54
Communication and Public Utilities	— 46
Services	116
Finance	— 96
Government	
State and Local	—232
Federal civilian	— 52
Military	— 5
Other	— 23
Total in all Industries	—1,200

Source: Survey of Current Business, April, 1964, pp. 28-29.

The preceding table depicts an unfavorable position of many Massachusetts industries from the point of view of regional-share effects. For manufacturing industries we enjoy a regional-share advantage only in the following branches: apparel, motor vehicles and equipment and non-automotive transportation equipment. In the participation income only Services have a positive regional-share effect.

It is interesting to note that we have a number of industries with above-average rate of growth or fast-growing industries compared with the all-industry national growth. Yet the same industries show a negative regional-share effect, meaning that when compared with their national counterparts they are slower to expand and therefore their share will not contribute as much to the overall growth of the economy of the Commonwealth as they otherwise might. We should be most concerned with these industries so vulnerable to the decision to leave our State. These are the potential runaway industries. They are listed here as they appear in the table just mentioned: Food, textiles, lumber and furniture, leather, paper, printing, chemicals, rubber, stone, clay and glass, ordnance, primary and fabricated metals, instruments, trade, construction and communications. The government of the Commonwealth should express interest in these industries not only because they are a part of our economy and thus a source of income and employment for our people but also because they are a source of public income through taxation. These are also the industries where we can find companies which invest relatively more in capital replacement than in expansion. Further investigation is necessary as to why these companies do not expand at the same rate as their counterparts in the nation, or at least in the New England area. The government may be able to do much to alleviate the causes for such lack of efficiency in terms of regional-share effects.

The first thing to do is to examine and compare objectively conditions in neighboring New England states. If the regional-share effects for any of the above-mentioned industries are positive for one of our neighboring states, then sooner or later such industries will move there. We cannot escape this slow but sure drain of our manufacturing industries if we do not forge and apply in time active and consistent policies. One important area where our government can act and should, without delay, is to find out to what extent the tax structure and labor cost are responsible for the gradual decay of certain industries in our state.

From the same study of the U. S. Department of Commerce here is a list of New England states enjoying a comparative advantage over Massachusetts with respect to the regional-share differential:

Industry	*Potential Competitors for Eventual Relocation of Mass. Industries*
Food	Connecticut
Lumber and Furniture	Connecticut and Rhode Island
Leather	Maine, New Hampshire, Connecticut and Rhode Island
Printing	Connecticut, New Hampshire, Vermont
Chemicals	Connecticut and New Hampshire
Rubber	New Hampshire
Stone, Clay and Glass	Connecticut, Rhode Island, Maine and New Hampshire
Ordnance, primary and fabricated metals	New Hampshire
Electrical machinery	New Hampshire, Rhode Island, Maine and Vermont
Trade	New Hampshire and Connecticut
Construction	Connecticut, New Hampshire, Vermont
Communication	Connecticut

Source: Survey of Current Business, April, 1964, pp. 28-29.

In conjunction with the same problem, we must also heed the population migration from the Commonwealth. In another part of this report it was mentioned that about a quarter of a million foreign white stock residents of Massachusetts have left our state during the last decade. The same study by the U. S. Department of Commerce pointed out that "the shift of population after 1948 was from the northeast and central plains to the southwest and west. When weighted by income, there is a close coincidence between relative gains and losses in income and in population on both a state and regional basis."[3]

It was reported further that "in New England, the main migration (of white population) was from Massachusetts . . ." This indicates that the government of the Commonwealth look into this phenomenon and take some corrective action if and when possible. It would be good to investigate whether our taxation system has anything to do with this migration, since this phenomenon is more pronounced in our State than in the rest of New England.

It is certain that shifts in population have a direct effect upon income growth. Yet per capita personal income in Massachusetts has continuously increased from $1,664 in 1950 to $2,965 in 1964. As a matter of fact between 1953 and 1964 per capita personal income in the Bay State has increased by 53% as against 48% in New England and only 43% in the Nation. Where is the negative income effect due to the population shift? The study of the U. S. Department of Commerce mentioned above has found out that "In New England States, increased average incomes relative to the national figure offset a large portion of the income loss due to the population shift." A further explanation of why per capita personal income in our state is higher than the national figure lies in the fact that the population growth in the Bay State is slower than in the Nation and even slower than in New England. Indeed, between 1950-1960 the U. S. population increased by 18.5%, New England by 12.8% and Massachusetts by only 9.8%. (See: Appendix Table 2).

The total personal income for analytical purposes can be divided into two categories:

1) Income received by individuals from their participation in current production. This is called the "participation income" and is composed of wages, salaries, supplementary labor income and earnings of self-employed persons.

2) Income received from investments and the so-called "transfer payments" made by the government under the various welfare programs.

The total personal income in Massachusetts during 1964 reached $15.8 billion of which more than $10.6 billion were from wage and salary disbursements, or 67% of the total. As a percentage of the total, the share in wages and salaries in 1964 was about the same in New England and in the Nation. Compared with 1963 the total personal income in the Bay State increased by $1 billion, or a 6% rise, paralleling the national standard. The New England area however, advanced over the same period by 7%. Between 1961-64 Massachusetts increased her total personal income by 17% but was still lagging by one percent point behind New England and the Nation. But over the same period of time the Bay State jumped her per capita personal income, as already mentioned by 14%, leading with one percent point the rest of New England and the Nation.

The property income in Massachusetts during 1964 came to $2.3 billion and represents an important source of income which is increasing. In 1963 it stood at $2.1 billion.

The government transfer payments amounted to $1.7 billion in 1964. The increase over the previous year was by 90 million.

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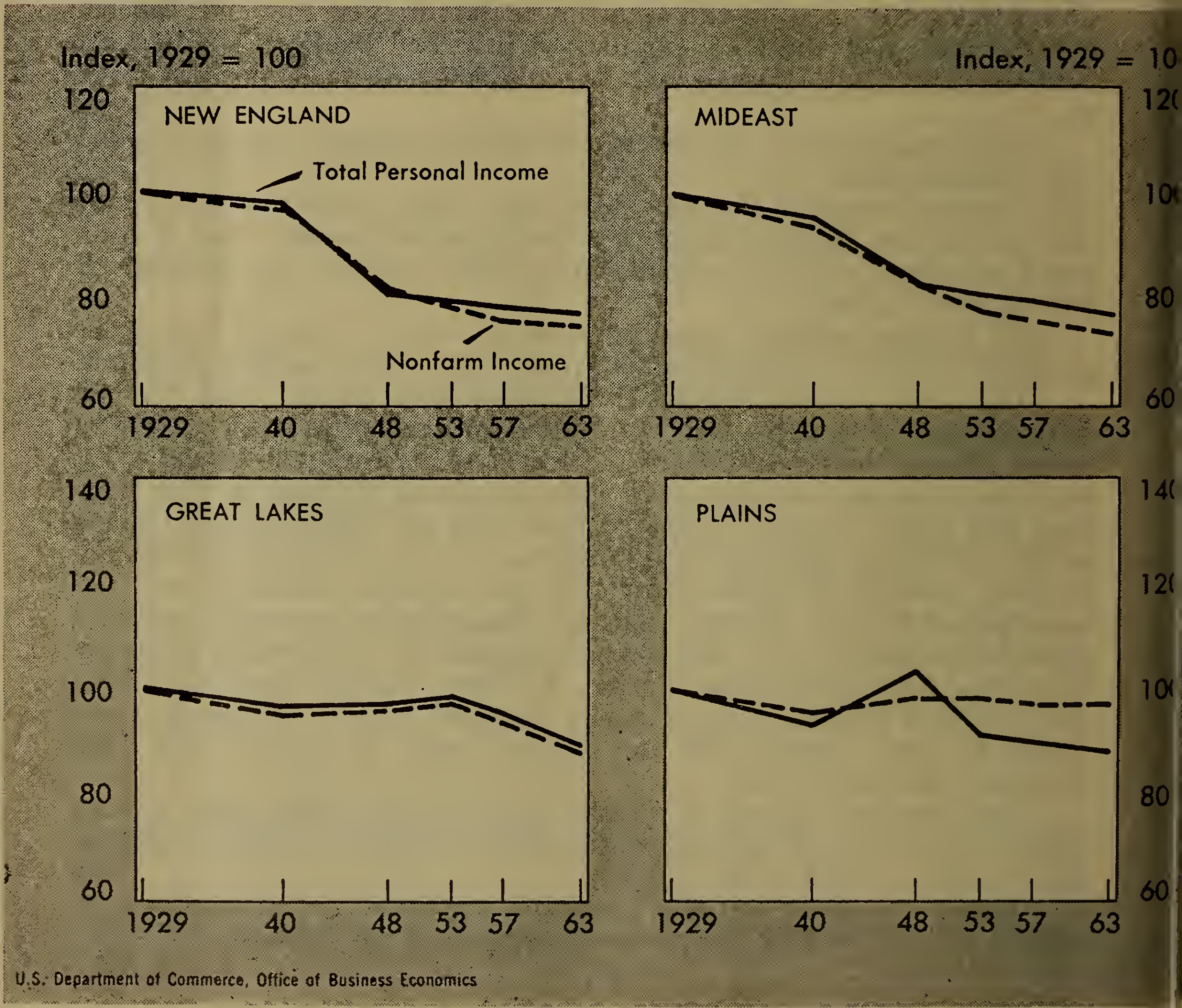
[3] Survey of Current Business, April, 1964, p. 24.

REGIONAL TRENDS

Changes

1929 =

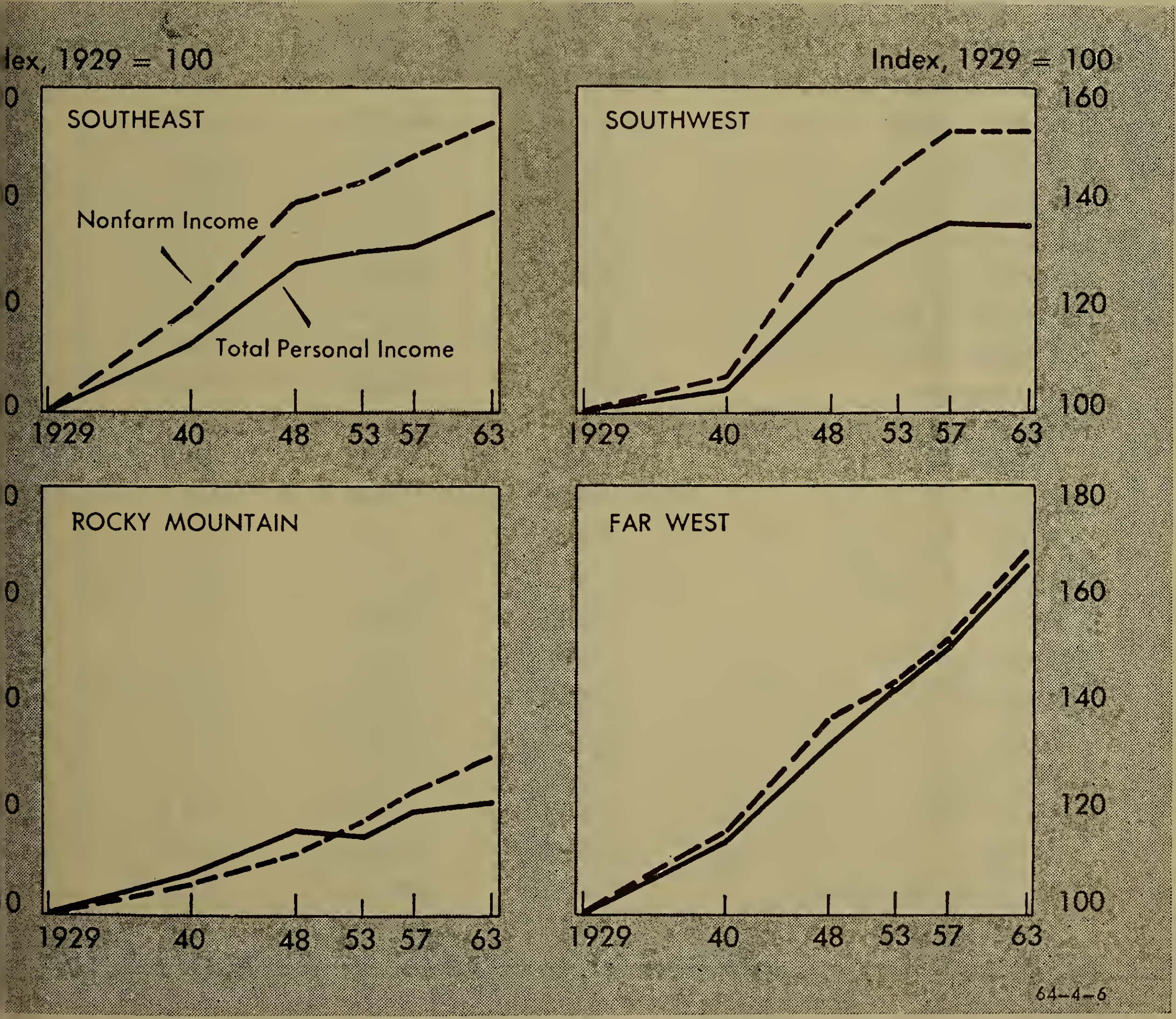
- **In the Eastern and Central Regions the Percentage Share of Income Has Been Persistently Down.**
- **Temporary Reversals in the Plains and Great Lakes in the 1940's and Early 1950's Reflect Economic Demands of World War II, High Agricultural Prosperity, Boom in Durables, and Korean Hostilities.**



U.S. Department of Commerce, Office of Business Economics

TAL PERSONAL INCOME
gional Shares
cent

- **Strong Uptrends Prevail in the Southern and Western Regions Despite the Downward Pull of Agriculture in the Southern Areas.**



III. ISSUES AND PERSPECTIVES

1. Outlook for Capital Spending and Industrial Activity in 1966

There is good news for the economy of the Commonwealth in 1966. Massachusetts manufacturers plan to increase capital outlays during the coming year by 20.6%, as revealed by the survey conducted by the Federal Reserve Bank of Boston. The total amount of expenditures for new plants, new machinery and equipment in 1966 is estimated to reach $384.3 million, $65.8 million more than in 1965. From this total amount, about $86.7 million is expected to be used for the construction of new plants, a 53.5% rise over the corresponding capital expenditure in 1965. The balance of $297.6 million is planned to be spent on new machinery and equipment, a forecast increase of 13.6% over 1965. The following table shows a comparison between 1961 and 1966 (planned).

TABLE 1

CAPITAL SPENDING PLANS OF MASSACHUSETTS MANUFACTURERS
(in thousands of dollars)

Industry	*1965 Revised*	*1966 Planned*	*Percent Change 1965-1966*
All Manufacturing	$318,541	$384,331	20.6
Durable goods	171,736	188,978	10.0
Ordnance	3,942	3,871	— 1.8
Primary Metals	12,115	8,868	—26.8
Fabricated Metals	23,597	15,055	—36.2
Machinery	47,883	40,898	—14.4
Electrical Machinery	24,249	47,940	97.7
Transportation Equip.	15,974	8,291	—48.1
Instruments	30,661	54,583	78.9
Lumber & Wood Products	1,477	1,199	—18.8
Furniture	3,470	690	—80.1
Stone, Clay and Glass	8,368	7,222	—13.7
Nondurable Goods	146,805	195,353	33.1
Food	20,705	33,045	59.6
Textiles	17,301	22,734	31.4
Apparel	5,825	3,582	—38.5
Paper	24,672	63,900	159.0
Printing	17,702	12,374	—30.1
Chemicals	14,763	7,322	—50.4
Rubber	25,268	21,857	—13.5
Leather and Shoes	11,093	20,134	81.5
Miscellaneous	9,476	10,405	9.8

Source: Federal Reserve Bank of Boston.

On an overall basis (including both manufacturing and non-manufacturing business investment) the economy of the Bay State should achieve a gain in new investments of about 8% over 1965. If realized, this would be on the same level of growth as is estimated for the rest of the country, in accordance with the McGraw Hill survey taken last fall. It is also worthwhile mentioning that the realization of this optimistic view of our manufacturing investment in 1966 exceeds the rate of growth for manufacturing capital expenditures in the entire New England area by about 3 percent points, whereas in 1965 Massachusetts lagged New England, by about 5 percent points.

This favorable forecast does not necessarily mean that we shall have no problems with our economy during the coming year. It does show that despite uncertainty as to the Commonwealth's future tax and fiscal position, a high level of economic activity will induce increased business investment. It may also reflect the fact that despite the fiscal uncertainties, businessmen feel that there is a basis for hope that the "climate" in the Commonwealth will improve. On the last day of 1965 Mr. Ervin Pietz, the 27th President of the Associated Industries of Massachusetts, declared in an interview regarding the prospects of the coming year: "The signs are good. I think it will be a good year for Massachusetts industry." In continuation he added that the A.I.M. will try during 1966 to bring about legislative changes in workmen's compensation and unemployment compensation, two important cost elements which combined, in his own words "represent more than the corporate tax paid by industry." (See: Boston Globe of December 31, 1965).

The largest share of manufacturing capital expenditures for 1966 will be concentrated in nondurable goods where planned investment is $195.3 million. This represents more than half of the total new investments with a rise of 33% over 1965. The rest of $188.9 million is expected to be invested in the durable goods sector, a 10% rise over last year. This represents a sharp break from 1965 when the emphasis was on durable goods. It is interesting to note that the New England region as a whole plans an opposite shift in new investments with a greater growth in durable than nondurable fields.

CAPITAL SPENDING

	Massachusetts		*New England*	
	Change 1964-65	*Change 1965-66*	*Change 1964-65*	*Change 1965-66*
Durable goods	+26.7%	+10.0%	+10.9%	+25.9%
Nondurable goods	— 0.3%	+33.1%	+25.7%	+ 9.2%

The largest amount of planned investment for 1966 in a single industry is in the paper business where $63.9 million are expected to be spent. This represents an increase of 159% over last year. The second place is occupied by the manufacturing of instruments, which plans to invest in the coming year $54.8 million, a 78.9% rise over 1965. Third place goes to electrical machinery where an investment of $47.9 million is expected or an increase of 97.7% over the previous year.

In the nondurable goods sector additional new investments are expected in the following branches: Leather and shoes, food and textiles. The leather and shoe industry for instance plans to increase its capital expenditures in the coming year by 81.5%. The food and textiles industries follow in the same direction by 59.6% and 31.4% over last year.

Also, the nondurable goods sector, chemicals, printing, rubber and apparel are expected to decrease their new investments in 1966 as compared with 1965. The reduction begins at a low of minus 13.5% for rubber and goes up to minus 50.4% for chemicals. Despite these decreases, overall capital outlays in the nondurable goods sector are estimated to increase by 33.1%.

With the exception of electrical machinery and instruments mentioned above, most of the durable goods industries plan to reduce their capital spending. In this category the following branches are included: transportation equipment, furniture, fabricated metals, machinery, ordnance, primary metals, lumber and wood products, stone, clay and glass. The reductions in capital expenditures for these branches starts with a low of —1.8% for ordnance and go to —80.1% for furniture. Nevertheless in the aggregate the capital spending in the durable sector is expected to increase by 10%.

Looking further at the breakdown of capital outlays between investment for new plants and for new machinery and equipment, the shift in emphasis toward more investment in the nondurable goods sector for 1966 appears even more pronounced. The following table gives a comparison between 1965 and 1966 (planned).

TABLE 2

EXPENDITURES FOR NEW PLANTS
(in thousands of dollars)

Industry	*1965 Revised*	*1966 Planned*	*Percent Change 1965-1966*
All Manufacturing	$56,504	$86,714	53.5
Durable Goods	30,690	36,643	19.4
Ordnance	260	275	5.8
Primary Metals	1,454	0	—100.0
Fabricated Metals	1,723	0	—100.0
Machinery	12,689	5,329	— 58.0
Electrical Machinery	1,964	8,629	339.4
Transportation Equip.	4,393	0	—100.0
Instruments	3,833	21,886	471.0
Lumber & Wood Products	425	55	— 87.1
Furniture	2,953	0	—100.0
Stone, Clay & Glass	996	469	— 52.9
Nondurable Goods	25,814	50,071	94.0
Food	0	9,352	——
Textiles	5,606	4,706	— 16.1
Apparel	210	0	—100.0
Paper	3,183	13,036	309.6
Printing	3,894	3,440	— 11.7
Rubber	1,373	447	— 67.4
Chemicals	2,552	3,104	21.6
Leather & Shoes	8,996	15,986	77.7
Miscellaneous	0	0	——

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

Investment for new plants in the nondurable goods industries is expected to increase by 94% compared with last year whereas in the durable goods sector a rise of only 19.4% is planned.

The leading industries with a planned rise in capital spending for new plants are: instruments, 471.0%; electrical machinery 339.4%; paper, 309.6%; leather and shoes, 77.7%; rubber, 21.6%; ordnance 5.8%. Another group of industries, the majority from the durable goods sector, are planning to decrease their expenditures for new plants as compared with last year. Here is a list: primary metals, fabricated metals, machinery, transportation equipment, lumber and wood products, furniture, stone, clay and glass, textiles, apparel, printing and chemicals. The reduction begins at a low of minus 11.7% for printing and goes up to minus 100% for several industries. (Minus 100 means that no investment in new plants is planned for 1966.)

The investments for new machinery and equipment are much larger than those for new plants. They do not show spectacular changes, they are more stable as the following table reveals.

Leading industries planning to increase capital outlays for new machinery and equipment are: paper, 136.7%; leather and shoes, 97.8%; electrical machinery, 76.4%; textiles, 54.2%; furniture, 33.5%; instruments, 22.9% and food, 14.4%.

Another group of industries which is planned to cut investments for new machinery and equipment in 1966 includes: ordnance, primary metals, fabricated metals, transportation equipment, stone, clay and glass, apparel, printing, chemicals, and rubber. The reduction begins at a low of —8.4% for stone, clay and glass and goes up to —48.7% for chemicals.

SALES EXPECTATIONS

The state survey conducted by the Federal Reserve Bank of Boston reveals that for the 4th quarter of 1965 from a sample of 118 Massachusetts firms, 36% expected an increase in sales over the previous quarters; 47% thought that they would stay the same and only 17% expected a decline. (See: Appendix Table 14).

For 1966 from the same sample, 50% of the firms expected an increase; 31% thought that they would stay the same and 19% believed there would be a decline. (See: Appendix Table 15).

THE CAPACITY OF UTILIZATION

One other important tool of analysis in judging the economic situation of an industrial area or country is the existence of "excess capacity." It refers to the actual utilization of the existing machines and technical equipment. A more or less normal capacity utilization in our country is often regarded as about 90%. Whenever the capacity-rate of operation is higher than 90% the economy or a particular branch is considered to be unusually strong. But if rates are below the 90% standard, "excess capacity of production" exists.

If we look at the capacity-rates of utilization for Massachusetts manufacturers between the end of 1964 and the fall of 1965 we can see some encouraging signs for 1966. The rate of operation for all manufacturing increased from 86% to 88% leaving room for another jump which could be made in 1966 to reach 90% capacity utilization. The durable goods sector over the same period increased from 84% to 85%.

TABLE 3

Expenditures for New Machinery and Equipment
Massachusetts
(in thousands of dollars)

Industry	*1965 Revised*	*1966 Planned*	*Percent Change 1965-1966*
All Manufacturing	$262,036	$297,617	13.6
Durable Goods	141,046	152,335	8.0
Ordnance	3,682	3,596	— 2.3
Primary Metals	10,661	8,868	— 16.8
Fabricated Metals	21,874	15,055	— 31.2
Machinery	35,194	35,660	1.3
Electrical Machinery	22,285	39,311	76.4
Transportation Equip.	11,581	8,291	— 28.4
Instruments	26,828	32,967	22.9
Lumber & Wood Products	1,052	1,144	8.7
Furniture	517	690	33.5
Stone, Clay & Glass	7,372	6,753	— 8.4
Nondurable Goods	120,990	145,282	20.1
Food	20,705	23,693	14.4
Textiles	11,695	18,028	54.2
Apparel	5,615	3,582	— 36.2
Paper	21,489	50,864	136.7
Printing	13,808	8,934	— 35.3
Chemicals	13,390	6,875	— 48.7
Rubber	22,176	18,753	— 17.4
Leather & Shoes	2,097	4,148	97.8
Miscellaneous	9,476	10,405	9.8

Note: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

The nondurable goods industries in the aggregate advanced from 87% to 92% capacity utilization. This economic progress in 1965 was due in a large measure to the national boom and the private initiative of the business community.

The list of industries which have reached and even surpassed the 90% capacity utilization in the fall of 1965 is impressive: machinery, 92%; instruments, 94%; food, 96%; apparel, 94%; paper, 92%; rubber, 95% and leather and shoes, 98%.

But there is an important group of industries where the capacity utilization is rather low. The lowest rates of operation are in: lumber and wood products, 61%; furniture, 78%; and transportation equipment 79%. Intermediate rates of utilization are found in chemicals

80%, printing, 84%; fabricated metals, 84%; electrical machinery, 85%; stone, clay and glass 85% and textiles 87%. Some of these industries actually suffered a decline in their rate of capacity utilization during 1965, as follows:

CAPACITY UTILIZATION RATES

	End of 1964	*End of 1965*
Transportation equipment	83%	79%
Electrical machinery	86%	85%
Instruments	96%	94%
Textiles	92%	87%
Printing	86%	84%

2. Urban Versus Rural Population Trends

One important demographic topic is the relationship between urban and rural population. The total population of the Bay State grew from 4.7 million in 1950 to 5.1 million in 1960. The urban population over the same period of time increased from 3.9 million to 4.3 million, including the suburbs. These absolute figures make it appear that we were following the national trend toward more urbanization. But the conclusion is not so evident when we consider the fluctuation of the rural population in Massachusetts as compared with the country as a whole. The U. S. rural population over the same period declined, whereas in our state the rural population increased.

In accordance with the U. S. 1960 census the rural population is composed of two groups: 1) The rural-farm (persons living on farms), and 2) rural non-farm (the remaining rural population). People living in communities of less than 2,500 inhabitants or in an area where the density is less than 1,500 persons per square mile and who are not associated directly with farming constitute the rural non-farm group. In Massachusetts, whereas the rural-farm group declined from 1.8% (1950) to 0.7% (1960) of the total population, the rural non-farm group increased from 13.8% (1950) to 15.7% (1960). In the aggregate, the rural population (farm and non-farm) over the same period increased from 15.6% to 16.4% of the total population in the Bay State while the urban population in the state declined from 84.4% in 1950 to 83.6% in 1960.[1] In the country as a whole, even though the rural non-farm group became more numerous (as in Massachusetts) nevertheless the U. S. rural population (farm and non-farm) declined from 36.0% (1950) to 30.1% (1960).

Under these circumstances the national trend of urbanization over the decade in question went up by +5.9% whereas in Massachusetts it went down by —0.8%. Since the change in the trend for our state is relatively small, one might say that Massachusetts, while not moving too strongly in the opposite direction to the nation, nonetheless is slowing down in the process of urbanization. Such a conclusion is consistent with the nature of a highly urbanized area. In any case, this is a trend to be watched in the future because there might be a shifting of population not only from old cities to suburbs but also from suburbs into rural non-farm areas in order to escape higher taxation and other economic and social pressures. On the other hand, former members of the rural-farm group who quit farming to look for better jobs in industry may not need to move into the cities or suburbs. They can settle in a rural non-farm area more familiar to them, thus counteracting the national trend toward more urbanization. Better means of transportation in conjunction with higher taxes in cities and suburbs are encouraging this new pattern in American society—the shifting of population to country-style living.

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[1] Statistical Abstract of the United States, 1965, p. 16.

The subject under more persistent discussion in recent years is the phenomenon of population exodus from old cities into the suburbs.

The Decennial Census of 1965 taken by the Secretary of the Commonwealth gives more detail about this phenomenon. Boston's population decreased from 724,702 in 1955 to 616,326 in 1965—a decline of 108,376 persons. The Boston Globe reports this under the title "Cities Shrink; Towns Grow" with the observation that "Most other large cities (in addition to Boston)—Cambridge, Lawrence, Lowell, Lynn, Somerville and Worcester—show decreases in population. Not one all across the state shows a substantial increase." On the other hand, "the suburbs all across the state are mushrooming."[2] The old cities are on the defensive with mounting fiscal problems as a result of this shifting of population from urban areas to the suburbs.

The urban population in Massachusetts and Maine when compared with the rest of New England has a different trend according to the following statistical information.[3]

	1950	*1960*	*Change in percentage point*
	in percentage		
Massachusetts	84.4	83.6	—0.8
Maine	51.7	51.3	—0.4
New Hampshire	57.5	58.3	+0.8
Vermont	36.4	38.5	+2.1
Rhode Island	84.3	86.4	+2.1
Connecticut	77.6	78.3	+0.7

On the other hand in the country as a whole the historical process of urbanization continued to grow from 64.0% of the total population in 1950 to 69.9% in 1960.

The rural farm population in Massachusetts declined from 80,000 in 1950 to 36,000 in 1960.[4] In New England as a whole there was a similar process of an agricultural revolution when 403,000 people living on farms in 1950 decreased to 180,000 in 1960.[5] The national trend went in the same direction when 23,048,000 Americans living on farms in 1950 decreased to 13,445,000 in 1960.[6] The rise of modern technology applied to agriculture and the development of large farm corporations as a by-product of the Federal price support programs, were among the most active factors which forced the marginal farmer out of business.

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[2] The *Boston Globe* of October 2, 1965.

[3] Statistical Abstract of the United States, 1965, p. 16.

[4] *Ibid.*

[5] *Ibid.*

[6] *Ibid.*

3. The Need for a Central Source of Statistics

In its work during the year and in the preparation of this report, the Board has received the help and assistance of many agencies of the Commonwealth, of the Federal Reserve Bank of Boston, of the Bureau of Labor Statistics, Regional Office, and other private organizations and individuals. We record here our appreciation and thanks for such assistance. At the same time we would like to point out the extreme difficulty which we have encountered in collecting a body of data useful in appraising the present state of the Commonwealth's economy let alone forecasting its future course.

We are, however, not the first ones to express concern and anxiety about the lack of sufficient and reliable statistics on the economic conditions of the Bay State. A well-known journalist and financial editor in this area last spring wanted to write an article about statistical information on New England. But he ultimately had to deliver a strong indictment of the lack of statistics, even using the terms "imperfect vacuum" to describe the state of affairs on this subject. Here is the story of the experience of an able financial editor, Mr. Jan Menzies

"When it comes to getting statistics in New England . . . forget it.

"One could get a better count of the Navaho Indians than New England's biggest industries and the employees in those industries.

"The Globe has spent the better part of a month trying to get an overall picture of the region's largest industries and the numbers employed.

"It has been a story of blood, sweat and tears. In the final analysis it has boiled down to phone calls to individual companies and some companies can somehow manage to give the researchers a three-day runaround.

"One is almost horrified to discover that state departments of commerce and industry and state chamber of commerce only have a few general figures. Some don't even have these . . .

"The paradox of this situation, we believe, is that while New England screams that it needs industry, advertises the availability of industrial parks and sends emissaries to entice new businesses, the bread and butter statistics are not available . . .

"And how is it possible to get a clear picture of what's going on around the state without such information . . .

"We can safely say that even the limited statistics on this page, and we know we've missed some, are not available to one single New England state legislator, congressman or senator.

"There isn't a governor in the New England states with even the overview available on this page, restricted as it may be . . .

Can we have confidence that we know where we are going when we know our legislators haven't such capsulized information available."[1]

Without exageration the experience of the Board confirms the above description as regards the state of statistical information in the Commonwealth. This does not imply that there are no data (although there appear to be serious data gaps for purposes of overall economic appraisal) but that whatever statistics are available are so fragmented among public and private agencies and are so different as to the primary reason for their collection that it is very difficult to put them together.

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[1] The *Boston Globe,* Business Financial Page. March 14, 1965.

Sometimes the link between two statistical series gathered by different agencies is missing, and thus, the information for an aggregate evaluation becomes useless. This again does not mean that the various agencies should not be allowed to collect statistics for their own information or control purposes. It suggests only that the Commonwealth needs a central repository where key series of data could be collected on a regular basis. We believe that such a central source of statistics would prove to be of value to the Governor, to the Legislature to the several administrative agencies and boards and to any other organization, institution or individuals interested in getting factual information about the economy of the Commonwealth as a whole.

The need for a central statistical office is not restricted to Massachusetts or New England, rather it is general in almost every State of the Union. The Economic Report of the Governor of California in March 1964 describes this issue in the following manner:

"There is no coordinated information on annual business investments in this state, either in total or in the various sectors of our economy. Data are lacking on the rate of industrial expansion. There is no comprehensive current reporting of governmental expenditures for new facilities and public works. Additional data are needed to round out the information currently available on job openings and characteristics of the unemployed. Then, too, little is actually known regarding the full economic consequence and social impact of unemployment."[2]

More evidence can be assembled to support the thesis that it is high time that every state should give careful consideration to the organization of a central statistical office or unit. At the 1964 Annual Meeting of the Governors' Conference in Cleveland, Ohio, Governor Henry Bellmon of Oklahoma sponsored a policy proposal which was adopted in the following form: "That the Governors' Conference, through its Executive Committee, make appropriate investigation and recommendations to the states for the standardization of statistical data in reporting, analyzing and evaluating governmental services."[3]

After some preliminary work done by an ad-hoc committee appointed by Governor Bellmon and making use of the professional resources of the Oklahoma State University, the Executive Committee met at Chicago on November 30, 1964. Governor Bellmon (also a member of the Executive Committee) made specific proposals on how to implement this project. It was decided that the topic "Standardization of Statistical Data" should be put on the agenda of discussions at the 1965 Annual Meeting of the Governors' Conference in Minneapolis.

The Council of State Governments, as staff agency of the Governors' Conference, was instructed to organize a meeting in Washington, D. C., with other Federal officials interested in the same issue.

On February 4, 1965 representatives of the Council of State Governments, the National Association of State Budget Officers, and the Oklahoma ad-hoc Committee met in Washington, D. C. with officials from the following Federal Agencies: The Bureau of the Budget, the Bureau of the Census, the Department of Commerce, the Department of Health, Education and Welfare and the Advisory Commission on Intergovernmental Relations. After a long and detailed discussion of the project the consensus was that "in this area no quick and easy solutions are at hand" and that "It is a long-term problem that eventually will require major changes in technical systems and administrative operations. In many states it may even be necessary to undertake revisions of the constitution to accommodate necessary state and local implementation."

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[2] Economic Report of the Governor. Edmund G. Brown, Governor of California. Transmitted to the California Legislature, March 2, 1964, p. 25.

[3] Report of the Governor's Conference Executive Committee on Standardization of Statistical Data.

The members of the Executive Committee of the Governors' Conference concurred unanimously with the view that there is a need for the standardization of statistical information collected by the United States Government at all three levels—Federal, State and Local—and for a steady communication on this subject among these governments. They recognized one important point, namely, that action must start within individual states. In their own words: "Unless there is a state agency with responsibility to seek improvement in this area and to serve as a focal point for cooperative efforts, interstate and federal-state coordination will be most difficult to achieve."

The Executive Committee made two recommendations:

(1) That each Governor be asked to establish a statistical standardization unit in his State; and

(2) That a "National Conference on Comparative Statistics" be sponsored by the Governors' Conference to be held not later than January 1, 1966.

The National Conference on Comparative Statistics convened in Washington, D. C. on February 23-25, 1966.

What have we done in Massachusetts to fulfill the first recommendation of the Governors' Conference Executive Committee? During the late fall of 1965 the Board conducted a survey with the various government agencies of the Commonwealth and other semi-public and private organizations on the subject of calling a Conference on Massachusetts Statistics to discuss the whole subject of how to improve statistics at the state and local level. The Federal Reserve Bank of Boston has offered to serve as host for such a conference. His Excellency John A. Volpe, Governor of the Commonwealth, has expressed great interest in this project and has agreed to open officially this Conference. Preparations are now being made and the opening date will be Wednesday, May 25, 1966.

4. A "Favorable Business Climate"

The term "Favorable Business Climate" is assuredly one of the most abused in the lexicon of business and government. It can be, and is, readily invoked as part of an exhortation against any measure that might directly or indirectly hurt all or part of the business community. Yet when all is said and done, and despite its abuse and misuse, there is some substance and importance to the term, particularly as it affects new business establishments and the enlargement of older ones. Briefly, a "favorable business climate" appears to be one where first, there is a fair measure of predictability as to the course of state and local government action second, there is a reasonable allocation of social costs as between business and other tax-paying groups; and third, where the state and local governments show some signs of being aware of the problems which businessmen face—particularly competitive and cost problems vis-a-vis firms located in other parts of the country. On none of these counts can the Commonwealth today be rated very high, although in spite of the ludicrous tax and fiscal situation of the last year, some progress was made in 1965 in improving the climate.

The matter of predictability is an important one for business managers. Long-run plans and cost estimates must be made with as great degree of precision as possible. Changing or capricious state policies or taxes can adversely affect such plans and estimates. So can the imposition of political graft or pay-offs needed in order to realize legitimate business plans. Massachusetts seems to delight in political brinkmanship across a broad spectrum of economic problems—taxes, unemployment compensation, workman's compensation and the like—making business predictions difficult. The pockets of corruption which prevail, as revealed by the Crime Commission and other investigatory groups, compound the problem. All states are unpredictable to some degree, but the general impression among both in-state and out-of-state businessmen seems to be that Massachusetts is more unpredictable than most and that the only safe prediction is that action (or costs) adverse to business must be assumed.

Nor does the Commonwealth enjoy a good reputation in terms of the share of social costs which business is expected to bear. Because of the very heavy dependence in Massachusetts on the property tax and because of the manner in which property taxes have, until recently been assessed, it has been inevitable that a relatively high proportion of the cost of government has been borne by business.

The final element—an understanding on the part of government of business' problems in dealing with competitive matters—is equally important. Here real progress seems to have been made in recent years and especially in the past year. In the past, business after business has failed or left the state with the only reaction being to see whether there was not one last drop of blood to be extracted from the corporate body before it either expired or crossed the state line. This attitude did not persuade businessmen that Massachusetts was a good place in which to establish or enlarge their enterprises. And this was especially true where other states were offering attractive "deals" and promises— sometimes by virtue of federal subsidy and largesse.

But while the "business climate" as usually defined has not been particularly favorable and still leaves much to be desired, Massachusetts has, nevertheless, survived as a significant industrial state. It has survived, and indeed prospered except for isolated areas, largely because of its technological skills, its diversified work force and the fact that it is still relatively near an enormous market (30% of the country's population living within 400 miles of Boston). The fact is that despite drawbacks of weather and politics, Massachusetts is on the whole a good place to live, and in the past few years has been an exciting and dynamic place. The future of the state as an industrial center appears to depend heavily on whether, over the next five to six years, it can so improve the business climate as to make it attractive for existing industry to expand and new industry to come in. Without further improvement in the climate, Massachusetts is likely to be under a serious handicap. The headstart which its educational institutions have given it in advanced technical industry (electronics, for example) is not likely to prevail in perpetuity. Already there is talk in Washington of building up alternative "centers of research excellence." There is little question that federal funds will be used to develop technical rivals to M.I.T. and Harvard, and that in time these other institutions will be able to offer some of the same environment and scientific aura that lead to the electronics and other scientific industries that have helped to replace textiles and shoes as major Massachusetts employers.

The importance of creating a favorable business climate which will lead to the expansion of existing industry and the establishment of new industry is underscored by the fact that Massachusetts has few natural resources likely to attract heavy industry and is not so geographically situated as to attract any of the major processing industries. There is no petroleum, no natural gas, no coal, no phosphate or bauxite. Inbound and outbound freight rates for industrial goods to the major midwest markets are relatively high as compared to alternative locations. For example, there is no reason for believing that if the considerable Massachusetts electrical machinery industry were to be reestablished, it would settle here. It is more likely that it would locate somewhere between Cleveland and Chicago. It is vital that continued existence in Massachusetts be made as attractive as possible not only to preserve the industry that now exists but to encourage it to expand here rather than in other locations.

During 1965, the Department of Commerce was substantially strengthened and placed under aggressive leadership, with the specific aim of enlarging the Massachusetts industrial base. We believe that the activities of this department should be further strengthened during 1966 and supported by every administrative and legislative means possible. We would urge that the department give special attention to the retaining and enlarging existing Massachusetts industry. Too often industrial development efforts are devoted largely to the capture of out-of-state firms, neglecting the firms already in the state. The department might well devote a considerable part of its effort to the expansion within the state of existing firms. One recent study of the Lowell-Lawrence area paints a discouraging picture of the static nature of Massachusetts industry. Fewer than half of the firms canvassed had any plans to expand, to grow or introduce new products.[1] That way lies sure decay.

A resolution of the state's tax and fiscal problems especially the passage of a sales tax and relief to the cities and towns will probably do more to improve the business climate than any other single measure that either the administration or the legislature could adopt. Similarly legislative restraint in dealing with the demands to liberalize social legislation, including unemployment insurance and workman's compensation, must come high on the list of contributions to an improved business climate.

5. Investment and Employment

It is a pleasure to be able to report that during 1965 the Massachusetts economy achieved a relatively high degree of prosperity. Investment increased, income was high and unemployment decreased to below 4% for the first time in many years. If it had not been for the uncertainties created by the sales tax and the fiscal problems of the state and the cities and towns, the performance of the economy might well have been still more spectacular. As it was, Massachusetts benefited from the general prosperity of the country as a whole and from the fact that an administration willing to listen to the problems of business occupied the chief executive offices. For the rest, of course, the credit is due to the business and financial community in conjunction with labor and other factors that have carried the 1965 economic plans for investment to successful implementation.

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[1] *A Study of Factors Affecting Industrial Growth in Northern Middlesex County and Environs,* Allen S. Powell, Thomas Murphy and Paul Angelo, Jr., Lowell Technological Institute Research Foundation, June, 1965, prepared for Area Redevelopment Administration, p. 105.

Almost all segments of the Massachusetts economy shared in the prosperity. The average weekly earnings in manufacturing increased from $96.00 in November 1964 to $100.00 in November 1965. The highest paid workers were those employed in stone, clay and glass industries who on the average received a weekly pay check of $137.38. The second group of high paid workers were those occupied in chemicals and allied products, receiving average weekly earnings of $132.61. The lowest paid labor was in the apparel industry where they averaged a pay check of $63.28 per week. Nevertheless, even the wages of this low paid group increased in 1965 by $2.70 per week since November 1964. (See: Appendix Table 27).

Perhaps the most significant event in the overall picture of the Bay State economy during 1965 was the role played by manufacturing, for many years the sick branch of the Commonwealth's economy. Between 1951 and 1964 manufacturing employment declined by about 100,000. The decline centered in the nondurable goods industries where the job loss in textile and leather industries alone amounted to almost 87,000. In the face of this massive decline, the small increases in other forms of manufacturing, notably electrical machinery, equipment and supplies, has not been able to take up the slack. Chart 1 (See: end of this section) reveals the distressed conditions of the manufacturing industries in Massachusetts during the past decade. To the troubled area of manufacturing industries we must also add the loss of jobs in agriculture where the employment decreased by 24.3% between 1950 and 1964. (See: Appendix Tables 25 & 26).

There were also changes in the opposite direction. In the sector of non-manufacturing business such as finance, trading, services and government included, employment increased by not less than 25.9%. (See: Appendix Table 26). But this was not enough to keep pace with the growth of the working force during the same period.

Between 1950 and 1964 we were faced with the hard fact of a chronic and steadily increasing unemployment. Average total unemployment increased from 101,800 in 1951 to 129,500 in 1964. Some relief came in 1955 when unemployment dropped to 94,900, but by 1964 it was up again to 129,500. This was a major issue for the Massachusetts economy during the 1960's.

The correlation between average total unemployment and declining manufacturing employment, specifically the sector of non-durable goods, is striking. During 1950-64 employment in the nondurable goods sector decreased by 105,800 jobs, which is close to the figure of 129,500 representing the average total unemployment for 1964. In the overall picture the Massachusetts economy during this period lacked the needed strength necessary to absorb the available supply of labor. The working force increased from 2,143,000 in 1951 to 2,329,300 in 1964, whereas total employment over the same period grew from 2,029,100 to only 2,199,300. (See: Appendix Table 24 and 25). This means that the work force advanced by 8.7% and the employment by only 7.9%. The differential of 0.8% does not seem to be a cause for anxiety. Nevertheless, we have to consider the fact that in 1951 there was already an unemployment rate of 4.8% of the work force and thus the differential has to be added. In this way we ended up with an unemployment rate of 5.6% for 1964.

It seems clear that a prosperous Massachusetts economy will in the future depend heavily upon gradually expanding manufacturing employment, and that assuring that this happens is perhaps the central economic problem facing the Commonwealth besides the fiscal issue. Increased employment in services, finance and government are definitely welcome, but they almost certainly cannot provide the number of jobs that will be required for a growing labor force. The unexpected and most pleasant event in 1965 was that manufacturing employment reversed its declining trend over the last decade and grew from 650,800 in January 1965 to 673,600 in November 1965. Chart 2 (See: end of this section) shows that we have an unique opportunity with a favorable set of economic conditions conducive to a rising volume of employment in every major field of economic activity. There is no guarantee that this opportunity will stay with us indifinitely. Much of our present expansion is due to outside factors like the national boom and the war in Vietnam. It is desirable to support this expansion by improved conditions inside the Commonwealth's economy. To this purpose in 1966 we should capitalize on the current period of prosperity and try by all efforts to make progress toward a larger manufacturing base.

Special attention should be paid to the fact that the group of older people in the Bay State is steadily increasing. In 1960 about one third of the Massachusetts population belonged to the 45 years of age and over group. This is a sign that we are moving toward a society with more older people. From the point of view of employment one important implication is that it is more difficult to relocate or retrain older workers in case their jobs are displaced in the course of technological innovations or other structural changes in the economy. One other important fact we must remember is that between 1950 and 1965 the Bay State economy as a part of the national economy had to struggle with unfavorable conditions imposed by three recessions: 1953-54, 1957-58 and 1960-61. The observation from Chart 3 (See: end of this section) is that unemployment between 1955 and 1964 did not go below the pre-recession levels during the following expansion. It is interesting to add finally that the structural changes in the Massachusetts economy during the last decades have already produced re-alignment in the composition of the occupational position of the employed workers. In general the blue collar employment between 1950 and 1960 declined by around 20% while the number of clerical and kindred workers (white collar employment) increased by 20% over the same period. (See: Appendix Table 26). The largest shift was in the group of professional, technical and kindred workers whose number over the same period increased by almost 70,000 or 37%. The largest decline was registered in the group of operatives and kindred workers where the number employed decreased by more than 42,000 or a drop of around 9%. (See: Appendix Table 26).

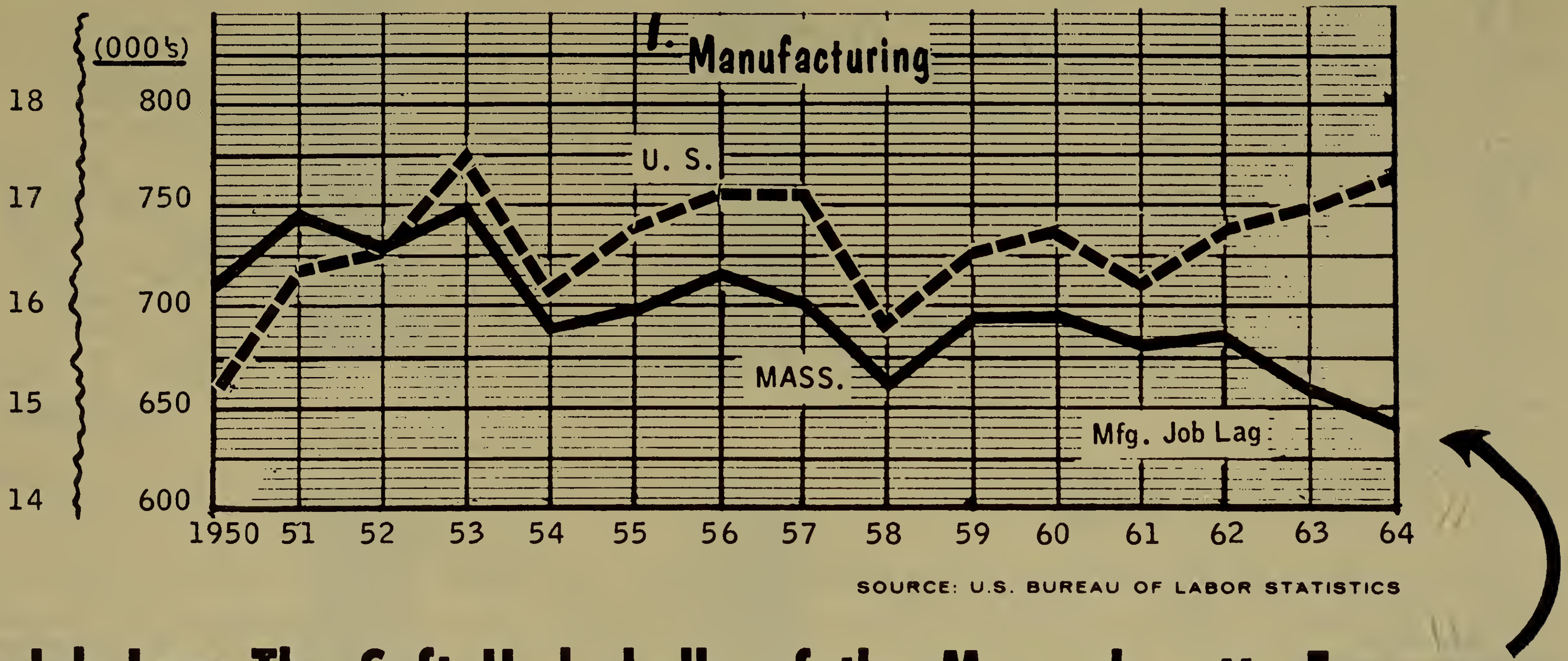
All these specific characteristics of the work force have repercussions upon both the volume of investment and employment.

The subject of investment can be further pursued by including the whole question of state tax policy, the corporate tax structure and the level of local taxation.

Since 1962 Massachusetts has a legal provision to create an incentive for more investment in machinery and equipment. Indeed, capital expenditures in new machinery and equipment are tax exempt for five years if the life of machinery is eight years or more. As mentioned in another part, this incentive proved to be insufficient.

The industrial plant is taxed by the local government. It is known that the high rate of property tax in Massachusetts is a negative factor for new investment. The sales tax is supposed to neutralize this negative factor. In the same direction of promoting more new investment is the constitutional amendment on the ballot in the fall of 1966, namely, the legal acceptance of the view that industrial development is also a public function and thus public funds could be used for this purpose.

CHART 1



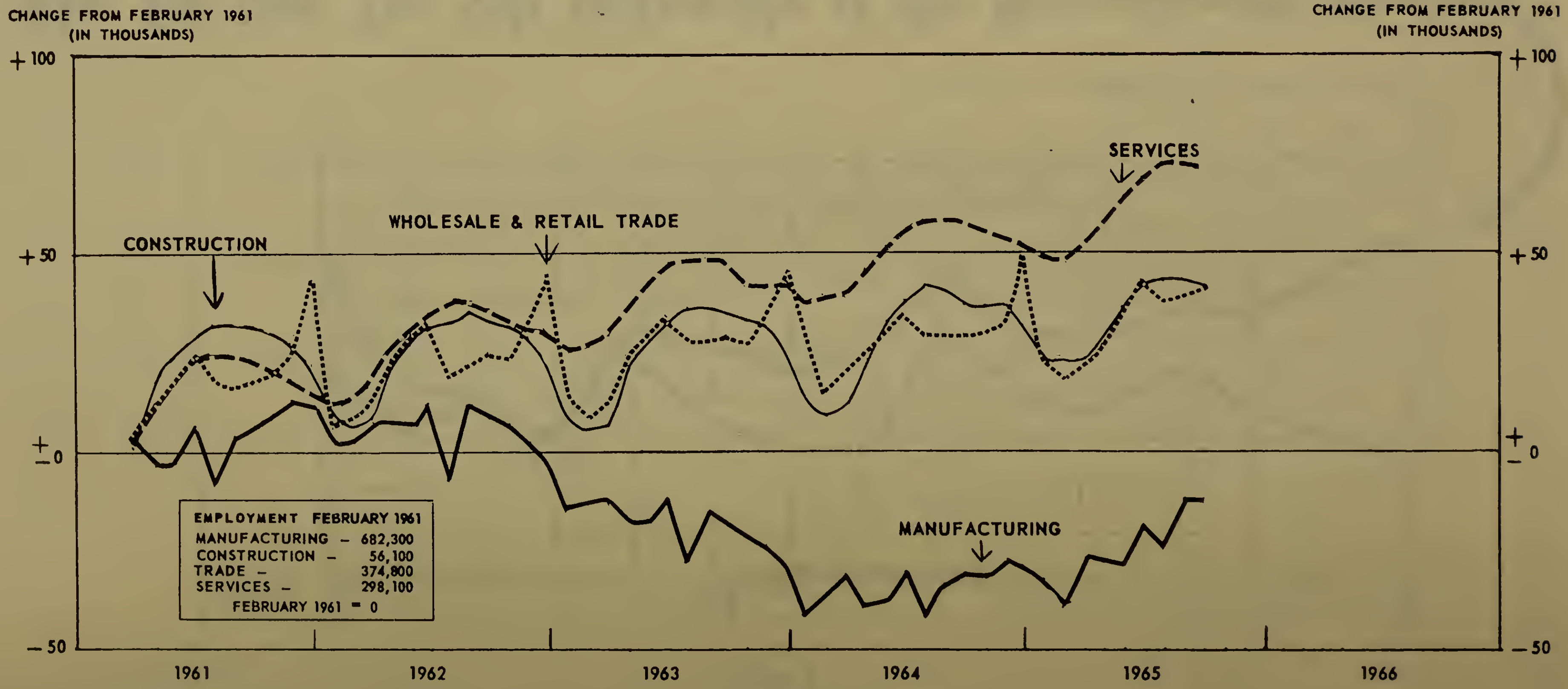
SOURCE: U.S. BUREAU OF LABOR STATISTICS

Mfg. Job Lag: The Soft Underbelly of the Massachusetts Economy

Source: U. S. Bureau of Labor Statistics.

CHART 2

THE NET CHANGE IN EMPLOYMENT IN MANUFACTURING, CONSTRUCTION, WHOLESALE AND RETAIL TRADE, AND SERVICES FROM FEBRUARY 1961

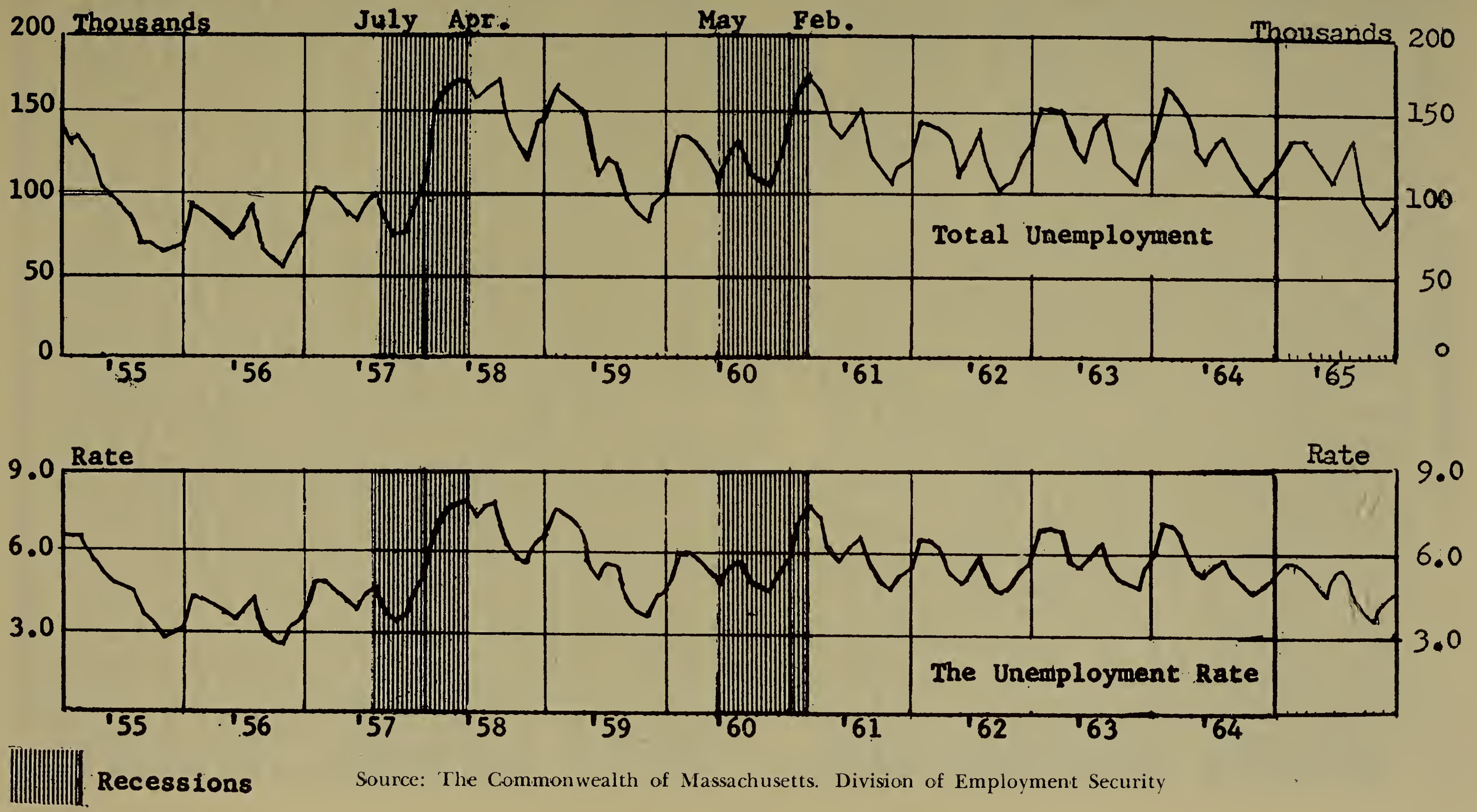


Source: Massachusetts Trends in Employment and Unemployment. Division of Employment Security, November, 1965, Vol. 1, No. 10.

CHART 3

TOTAL UNEMPLOYMENT AND THE UNEMPLOYMENT RATE

1955-1965



Source: The Commonwealth of Massachusetts. Division of Employment Security

6. Defense Industries

Military procurement actions play a vital role to the well-being of the Massachusetts economy. In fiscal years 1963 and 1964 the effect of cutbacks in procurement actions resulted in an employment decline of 25,000 people in the manufacturing sector. One can reasonably assume that further employment retrenchments were felt in other defense related industries. Nevertheless, the state does enjoy a relatively favorable status in Department of Defense procurement especially in the area of Research, Development, Testing and Evaluation contracts.

Although not entirely connected to defense needs, the state's position with respect to NASA appears somewhat weak, in spite of the location of the NASA Electronic Research Center. NASA contracts and Direct Awards to Massachusetts are not only small in relative or absolute terms but are declining. Figures (awards) released for the first quarter of fiscal year 1966 show no improvement over prior quarters. NASA programs are not only significant for the total economic well-being of the state but more important would help to absorb the impact of any reductions in Department of Defense awards.

Given the nature of the space program with its heavy Research, Development, Testing and Evaluation orientation and the heavy representation of Massachusetts in the Department of Defense, Research, Development, Testing and Evaluation program, it is reasonable to ask the reasons for the sharp difference between the two programs.

7. Encouraging Massachusetts Exports Abroad

An increase in the volume of Massachusetts goods shipped abroad would help not only the federal government in solving the balance of payments problem but would also aid the economy of the Commonwealth. To the extent that such exports were shipped through the Port of Boston (rather than the Port of New York) a build up of exports would also contribute to the revitalization of this potential asset.

Various efforts at increasing Massachusetts exports have been made in the past, as, for example, the Blue Trade program undertaken in Worcester. These isolated efforts have been promising but not sufficiently widespread to be fully effective. In part, the problem for smaller firms appears to lie essentially in the marketing area—finding out what the foreign market requires, arranging agents, brokers and channels. A foreign marketing effort for individual smaller companies may prove too expensive and time consuming in many cases. On a pooled or cooperative basis, the necessary marketing effort for a group of firms might well be feasible. The Department of Commerce and Development through its Bureau of International Trade might well experiment during 1966 with such a pooling of effort, seeking out non-competitive firms with a similar line of products and making arrangements in selected foreign countries for sales agencies, market research and the like. It is not intended that the Department should absorb the marketing costs of Massachusetts exporters, but limited experiments in this field, given due publicity, would seem to be warranted. If successful, the members of the pool could then establish their own association to carry on this cooperative effort.

The following story of two experiments in the field of export business shows that we have here in Massachusetts many more unexplored opportunities for economic expansion.

In the Christian Science Monitor of April 29, 1965 there was an article entitled "Small Firms Scurry for World Trade." An example was given of a printing business in the town of Emporia, Kansas, run by a man named Carl Didde. Mr. Didde shares the opinion that the "United States doesn't have to keep on spending more than it earns abroad." The statement is correct, but the problem of the balance of international payments, of course, is not that simple. As long as the Federal government has the present-day commitments in foreign countries the deficit cannot be corrected in its entirety by decisions of private business and banks. Mr. Didde thinks the answer is "more exports, not from the giant corporations already exporting, but from the thousands of small, hometown firms who have hardly given it a thought." From a three-man shop which did local work 20 years ago his firm today has become a $5 million a year business from which 40% is exported in 26 foreign countries.

Could we not do the same thing on a larger scale in Massachusetts? We would thus help not only the Federal government but also our state by inducing more investment, more jobs and more income not only for private business and our citizens but also for the Commonwealth. This is an exciting issue which merits attention. We cannot wait for a Mr. Didde to start similar experiments here. The Board is suggesting the possibility of building an "Association of medium and small size businesses in Massachusetts for export purposes" in the form of cooperatives. The government of the Commonwealth would not take any risk and would not invest any large size public funds in these "Cooperatives for Export Trade." The spending of the government would be limited to the relatively small amount of money necessary to call into existence these cooperatives. It will also be necessary to spend some money in finding out what particular products could be sold in various countries where there is some evidence for a market. As soon as the business has started and seems profitable, the whole project will run by itself.

There will be additional activity for the Massachusetts Port Authority and new progress for the Port of Boston would be initiated at no extra expense to the Commonwealth. If there is more business available, then new direct services between Boston and various European ports will be established.

The state of Massachusetts through its Department of Commerce might also investigate how to open a few experimental "Information Centers for Massachusetts Products" in some important European cities where we expect to sell enough so that future expenses of these Information Centers will be covered by the Cooperatives for Export Trade.

This may be an ingenious road for developing new products in Massachusetts for foreign consumption. The foreign consumers do not necessarily need to be Europeans. It is also profitable and helpful if our exports reach undeveloped countries where the Federal government has granted foreign aid or other European countries have transferred credits in American dollars. The American dollars would thus be repatriated and the pressure on our balance of payments eased. The Boston Globe of April 30, 1965 published an interesting article on its financial page: "Scots Prove It—Trying Harder Does Pay Off." It is the story of how Scotland, approximately the same size population as Massachusetts (5 million) since 1948, due to the energetic and indefatigable Scottish Council of Edinburg and supported by private funds successfully attracted 90 American corporations to establish plants in Scotland—such as I.B.M., Burroughs, Caterpillar Tractor, Beckman Instruments, National Cash Register and many others. The results are that this new business in Scotland employs more than 50,000 people, has a capital investment of more than $300 million and gross sales of over $500 million. The biggest export item of Scotland is no longer Scotch whiskey but office equipment. This tiny part of the United Kingdom is now second only to America in its sales of office equipment, and in the British balance of payments Scotland exports more than imports, and it is the only region which contributes a plus to the United Kingdom balance of payments otherwise under heavy pressure of a continuous deficit.

The story of Scotland and that of the successful printing business in Emporia, Kansas, are illustrative of how many opportunities we have here in Massachusetts to increase business activity and thus have a larger basis of income for our people and for the Commonwealth, not to mention the creation of more jobs and the relief for the U.S. balance of international payments. Of course, nothing will materialize by itself if we are not ready to neutralize any kind of impending difficulty and to use new imaginative projects with the determination of being successful. Private business is ready to participate in any investment project if shown evidence that at least a normal return is assured.

8. Air and Water Pollution

AIR POLLUTION

The Clean-Air Act (1964) and the Clean-Air Act Amendments and Solid Waste Disposal Act (1965) have put the Federal Government in the position of entering the area of air pollution problems. The Department of Health, Education and Welfare (HEW) was empowered to establish standards for the control of automobile and diesel truck emissions which are a danger to the public health.

It is understood that HEW is working on such standards to take effect September 1, 1967. All 1968 model cars will be required to have attached an exhaust control gadget that will cost around $45.00. The automobile industry knew that this regulation was coming but they expected it to take effect only after 1969.

California already has on the books a law requiring such an exhaust control system on any new car sold this year in that state.

A New York City Council's Committee that was looking into this same problem has proposed a ban on the use of soft coal for heating apartment houses and individual plants. Fuel fed incinerators were also recommended to be banned from new apartment houses. Finally, it was pointed out that private industry should try to reduce the sulfur in coal and fuel oil.

The big cities in the country are concerned with this particular problem of air pollution, some more and some less depending upon the degree of imminent danger. Los Angeles and San Francisco, for instance, are spending between 50 and 60 cents per person for fighting air pollution. How much is Boston, for instance, or other industrial places in Massachusetts spending where the problem of air pollution exists?

WATER POLLUTION

The Water Quality Act (1965) has the purpose to strengthen Federal efforts in combating water pollution. The main features of this Act are:

1. To give the States two years, i.e., until June 30, 1967 for setting water quality standards for any river that crosses into another state;
2. In case a state fails to establish these standards the Federal government, specifically the Department of Health, Education and Welfare has the prerogative to intervene and set those standards.
3. The Secretary of HEW has further received the power to enforce those standards whenever a state refuses to adopt them.

Up to the passing of this Act water pollution and the right to set water quality standards belonged to the states and interstate agencies. Beginning with June 30, 1967 these prerogatives will be transferred to the Federal government.

A number of provisions are worthwhile mentioning. The annual funds to be granted to those states which proceed with the establishment of sewage treatment plants, has been increased from $100 to $150 million. This, of course, is a drop in the water pollution-control bucket. New York State, for instance, has estimated at $1.6 billion the cost to solve this problem over the next six years. The citizens of that state have already approved the issue of $1 billion bonds to finance this project. This action highlights one important point, namely, that the bulk of the money necessary for the realization of this national program is supposed to come from the states.

The Water Quality Act provides for funds for 30% of the cost of treatment facilities whenever the respective state will match another 30%.

New Hampshire supplies 40% state aid for such projects, Maine 30% and Vermont 20%. There is a bill pending in Massachusetts which calls for 30% state aid. If the bill is passed any community in the Commonwealth could receive 60% financial aid (Federal and State) of the cost for any project to fight water pollution.

An interesting plan now being implemented in Massachusetts is the MDC $105 million project for a pollution control system in Boston Harbor and the Charles, Mystic and Neponset Rivers. The cost of removing the major sources of pollution from other rivers in the state has been estimated at $200 million and up but this figure is probably far too low.

In regard to the water quality standards on interstate rivers, the New England Interstate Water Pollution Control Commission was established in 1947 with jurisdiction over the six New England states. It has been announced that a new commission for New England will be appointed by the President in 1966.

9. The Case of the "Runaway Industries"

The Massachusetts economy has undergone significant structural changes during the past three decades. Some changes were inevitable due to technological progress and other social and economic innovations, including shifts in consumer's taste. The international situation has, of course, also affected the development of our State economy.

Two of the major structural changes have been the rapid decline in the textile and leather-shoe industries—examples of runaway industries. The most dramatic decline has occurred in the textile industry, once called "the backbone of Massachusetts manufacturing." The once great textile centers such as Fall River, Lawrence, Haverhill, Lowell and New Bedford are now classified as major areas having substantial unemployment. As late as 1950 the textile industry provided 118,000 jobs in Massachusetts, over 17% of total manufacturing employment. In 1964 the employment in the same industry was down to 39,600, in other words, a 66% decline between 1950 and 1964. (See: Appendix Tables 25 & 26). A large part of our textile industry moved to the southern states where conditions to earn a normal return on invested capital were and still are better than in the Bay State.

The textiles and allied industries still are continuing to be a major source of income and employment for the people of the Bay State as shown in the following table.

TABLE 1

ECONOMIC FACT SHEET ON MASSACHUSETTS TEXTILE AND RELATED INDUSTRIES

	Employment	*Establishments*	*All Employee Wages*[1]	*Capital Expenditures*	*Value Added by Manufacture*
Textiles[2]	39,400	444	$176,000,000	$14,271,000	$316,293,000
Apparel	58,200	1,121	197,000,000	4,656,000	322,193,000
Textile Machinery	10,600	86	57,000,000	5,000,000[1]	100,000,000[1]
TOTAL — ALL GROUPS	108,200	1,651	$430,000,000	$23,927,000	$738,486,000

[1] Estimated.

[2] Employment in the various segments of the textile industry are estimated as follows:

Cotton Textiles	9,100
Wool Textiles	10,300
Synthetic Textiles	10,600
Knit Goods	5,900
All Other	3,500
TOTAL	39,400

Source: Northern Textile Association, November 5, 1965.

There are many factors which led to the migration of our textile industry, some climatological, some economic and some political. And in a free economy, such as ours, there will always be changes and shifts in industry and business from one regional location to another. The real problems are created only when such changes and shifts are forced or accelerated by abnormal or inconsistent elements or conditions. Certainly the southern states had the advantage of a closer source of raw materials for cotton textiles relatively cheap, unskilled labor and new efficient plants. Massachusetts conversely possessed the advantage of skilled labor and a long tradition of knowledgeable experience not only in the process of production but also in trading both at home and abroad. But in addition Massachusetts had a pattern of relatively advanced social legislation which tended to make costs for Massachusetts operators higher than the comparable costs in southern mills.

Representatives of the textile industry maintain that our social legislation was and is still instrumental in accelerating and perpetuating the exodus of Massachusetts textile mills to the South. They indicated to the Board that the total social and fringe costs are approximately 15-17¢ per hour higher here than in the South and that this is in addition to much higher costs for such items as power. They cite the following for two cost items.

	Massachusetts Mill (per hour)	*Southeast Mill* (per hour)
Old Age & Unemployment Compensation	13.57¢	9.0¢
Workmen's Compensation	3.01¢	1.0¢
TOTAL	16.58¢	10.0¢

The estimated current cost of selected fringe benefits in New England (Massachusetts included) as compared with Southeast textiles mills were said to be as follows:

	New England	*Southeast*	*Differential*
Holidays	4.13¢	.34¢	3.79¢
Shift Differential	1.38¢	.89¢	.49¢
Vacation	6.03¢	5.56¢	.47¢
Group Insurance	4.07¢	1.78¢	2.29¢
Retirement Separation	.84¢	none	.84¢
TOTAL	16.45¢	8.57¢	7.88¢

The estimated current cost of selected fringe benefits (holidays, shift differential, vacation and group insurance) for a synthetic textile mill as presented by the same textile representatives indicates significant differences between our area and the South. Here are the figures:

	New England	*Southeast*	*Differential*
Weaving	15.68¢	8.46¢	7.22¢
Integrated	15.18¢	8.28¢	6.90¢
Fil. Flat Fabric	15.29¢	8.40¢	6.89¢

To understand the whole situation the fact must be also considered that practically the whole Southern Textile Industry is nonunion. And this has something to do with their success.

In a joint meeting of the board held with the President of the State Council AFL & CIO the migration of the textile industry to the southern states was discussed. The president clearly stated that the exodus of the textile industry cannot be entirely attributed to labor costs. It was stated that a substantial wage reduction would not have halted textile firms from moving south. Other and more important factors prompted the move. First of all, Massachusetts textiles had gone beyond a maturity point, plants in the north could not be operated efficiently due to old multi-storied structures and unreasonably high power costs. Meanwhile the southern states offered advantages unknown in Massachusetts, such as, industrial financing in building one-story modern factories, low power costs and an ample labor supply.

The Massachusetts shoe and leather industry also went through a declining process during recent years. A portion of it moved out and what is of special significance, into our neighboring northern states. Employment in this branch of industry declined from 72,000 in 1950 to 48,300 in 1964, a reduction of about 33%. (See: Appendix Tables 25 26). In October 1965 it had recovered to 48,800 but this does not change the problem.

Representatives of the New England Shoe and Leather Association presented to the Board a list of factors which in their opinion are responsible for the distress and gradual decline of this important branch of industry in the Bay State. First they mentioned the lack of stable labor relations and their inability to expand their labor force when needed. They contend that whenever additional workers are needed repeated efforts often result in failure to attract workers because those interviewed are receiving unemployment checks and thus are not eager to take the first offered job.

The second grievance they raised is that our labor legislation results in greater operating costs to shoe and leather manufacturers in the Commonwealth compared with their competitors in other states, particularly in the South. In specific terms they stressed that "both the State Workmen's Compensation and Unemployment Compensation Laws result in annual taxes which greatly exceed the cost per worker in other shoe states."

A third point offered by representatives of the shoe and leather industry to explain the exodus of these plants to other states is what may be called "unfair competition" exercised by other states interested in attracting new industry. Various Development Corporations in other states are using a variety of devices to convince Massachusetts plant managers that it is more profitable to relocate their business. These attractive offers take the form of: tax and water abatements, rent free or very low rental charges for modern one-story buildings, payment of moving costs and costs for hiring and training of new workers. Of course, here in Massachusetts in accordance with the state law such attractive offers to prospective employers cannot be used, thus placing the Commonwealth in an unfair competitive position.

A final point raised was that state income and local taxes on corporations and partnerships in Massachusetts in the aggregate "are a far greater burden than shoe and leather concerns pay out in other industrial states in the Union."

These factors put forward by the industry as responsible for the long-run sluggish conditions in the shoe and leather business appear to be similar to those raised by the textile industry. They need an impartial and thorough investigation with a view to remedial legislation or other action. The Board does not have the necessary staff to conduct such a study. These matters are raised here with the limited purpose of calling to the attention of the Governor and the legislature the need, as reflected by two specific industries, of continuing effort to maintain the environment or climate for a viable industrial base in the Commonwealth.

10. Manufacturing versus Services

In the period from 1950-1964 certain depressing factors in the manufacturing industries have caused considerable unemployment. Indeed, since 1951 manufacturing employment has been continuously on the decline. From a high of 746,900 employed in manufacturing in 1951 the number employed dropped to a low of 647,300 in 1964. The durable goods sector kept the balance and showed a relatively small fluctuation from a high of 307,500 in 1951 to a low of 304,700 in 1964. The big decline was experienced by the nondurable goods industries where employment decreased from a high of 447,800 in 1950 to a low of 342,600 in 1964.

A highlighting change in the opposite direction is the non-manufacturing sector of the Commonwealth's economy. The figures are indeed impressive since employment in the non-manufacturing sector increased from 1,045,500 in 1950 to 1,316,100 in 1964 or a rise of about 26%. The additional employment in the non-manufacturing branches is directly attributable to the sector of services which is becoming a vitally important segment in our economy. It would appear that we are moving toward an economy with more and more services as the following statistics indicate.

	Employment		*Change in %*
	1950	*1964*	*1950-64*
Services, Miscellaneous & Mining	216,400	348,400	+61.0%
Finance, Insurance & Real Estate	79,900	106,200	+37.4%
Wholesale and Retail Trade	353,200	403,300	+14.2%

At first glance, it appears that the employment decline in manufacturing has been generally offset by the non-manufacturing services and has solved the problem of insufficient employment and income in the Bay State. To believe that here lies the complete solution to our difficulties in the declining manufacturing industries is to be trapped by an illusion. First, a large part of these services are sustained by an adequate business with manufacturing products. If we are able to create better economic conditions for business and thus locate these manufacturing products here in the Bay State, then our employment and income will increase. Thus we would have a solid foundation for a steady development of services. Otherwise, the manufacturing goods have to be brought from other states, including imports from foreign lands, and we may thereby stumble into a vicious circle. Under such conditions to press for more services would mean to become more dependent upon manufacturing products shipped here from other places. But this cannot continue too long since the Massachusetts economy would weaken to the point where the sector of services would have to be curtailed. The only exception would be when we would concentrate in developing those services which could be and are sold to places outside of our state but this area is probably limited.

The other area where employment increased substantially is the public sector. Government employment at all levels in Massachusetts jumped from 208,100 in 1950 to 269,900 in 1964, that is, an increase of 29.7%. The many new programs of the Federal Government following the "Great Society" objectives undoubtedly will push further the number of Federal-State-and Local government employees for 1966 and the following years. But a rise in government employment per se does not imply that the economy of the Commonwealth has solved its problems. Many of the Federal projects require matching funds on the part of the state or in the long-run an increase in federal, state, and local taxation. This extra cost for the Massachusetts economy may appear under certain circumstances as depressing. In fact the cost of government, that is, taxation, becomes a burden for the economy if it reaches a critical point where it consumes a disproportionately high share of the current income. This also classically illustrates the point that whenever the problem of unemployment is treated by non-economic solutions such as the creation of more government jobs, we may run the danger of encountering new, unexpected difficulties.

In conclusion, we may say that the economy of the Bay state for the time being is in the process of shifting from manufacturing into non-manufacturing services activities. An important problem is to identify just how much of this shifting is natural and how much is artificial in the sense of being forced upon us because we did not apply the correct kind of economic and financial policies at the right time. This is a crucial issue for the future of the Massachusetts economy and employment. Opinions may be sharply divided on the interpretation of the shifting. One school of thought may take the shifting as an irreversible phenomenon, and the conclusion would be to forget about manufacturing and concentrate on services. Another school of thought may take the position that the actual shifting up to this moment is only partially justified. Therefore, in accordance with the latter interpretation, there is ample reason to take a second look at the issue and find out how we may be able to slow down the declining process of manufacturing industries. The goal then would be to restore and preserve a balanced development of manufacturing and services. The resurgence of manufacturing employment in 1965—a sort of "Massachusetts economic miracle" —seems to confirm the view of the latter school of thought.

11. Community Technical Education

For the up-grading of labor we need more vocational training schools. New York State has announced plans to establish in 1966 four experimental two-year colleges that would offer vocational training. The idea is to provide technical education for those who for some reason cannot enter a regular college. One other feature of this experiment is to accept also students who do not have a high school diploma. A similar project was advanced by the National Commission on Technology, Automation and Economic Progress, appointed by President Johnson to study the challenge of advancing technology. Among other things this Commission seems to recommend a nation-wide system of free public education through 14 grades including two post-high school years of vocational training or community college. Until the Federal Government comes to the rescue the Commonwealth of Massachusetts could and should increase her vocational training schools, giving to those qualified the status of a "Community Technical College."

No less important is the idea that more opportunities should be given to those workers who already have a job but who are willing to attend specialized technical courses in order to prepare themselves for better jobs and promotions. Jobs freed in this way can be filled by the unemployed. The Community Technical Colleges could help in this problem. Until they can be established the Government of the Commonwealth could ask the cooperation of the State University and other educational institutions with adequate technical staff and laboratories to offer special evening courses for workers, with the understanding that this is not toward a degree but rather a certificate of attendance for possible advancement.

12. Financial Relationships between the States and Federal Government

At the Governors' Conference in April 1965 a resolution was adopted to study the proposition that the Federal Government should return to the States a certain percentage of federally collected revenue. This idea was based on the tax-sharing principle which became known as the Heller Plan. The former Chairman of the Council of Economic Advisors, Prof. Walter Heller, recognized a basic deficiency in the financial struggle of our states and proposed that the Federal Government turn back to the states a certain portion of the Federal tax revenue to be used without condition. The Plan called for the Federal Government to grant annually to the states up to $3 billion. The proposition was further supported by a study conducted by the Brookings Institution, a non profit research organization.

It is obvious that so long as the Vietnam crisis is placing steadily mounting demands on the Federal budget, there is no likelihood that a plan for federal-state tax revenue sharing can or should, be put into effect. Indeed, the probabilities seem to run the other way, namely that federal taxes will be increased, not remitted. But it must be hoped that at some point the Vietnam war will be brought to an end or "de-escalated" so that the federal budget is no longer under pressure. At that point, the matter of federal-state tax revenue sharing should be reconsidered as a matter of top priority. Tardiness in pressing their demands, on the part of the states, will give federal bureaucrats time to develop and propose new programs which will quickly sop up any federal surplus arising out of slackening military outlays. The time to develop a detailed program for federal-state tax revenue sharing is now, even perhaps to the extent of drafting and introducing legislation which would take effect at some predetermined (reduced) level of federal military spending. The existence of such a law on the statute books might well prove to have significant anti-deflationary effects.

We urge the Governor to counsel now with the Governors of other states which are regularly "creditor" states in terms of sending to Washington more than they receive from it, with a view to developing a cooperative effort to draft and have introduced legislation for federal-state tax revenue sharing.

Can the Heller Plan help solve this long-run aspect of the issue? If we consider the magnitude of the present financial crisis of our cities throughout the country which is connected with budgetary troubles of many states, then we can see that the proposal advanced by the Heller Plan is clearly insufficient. The problem is much deeper and requires a more comprehensive and fundamental reappraisal of the entire structure of our public finance system including all three levels of government.

As for the magnitude of the problem in our state it was reported that in 1964 Massachusetts had contributed to the Federal income tax revenue about $3.2 billion. Over the same period federal grants to the Bay State amounted to $160 million, the highway program received about $70 million and national defense contracts brought in less than $2 billion. During 1964 alone if we can trust these statistics, about $1.0 billion net left the Commonwealth and nobody knows how much of it and when, comes back.

WHAT IS THE BASIC ISSUE?

We have a federal form of government, but unfortunately the Constitution from the beginning did not provide specific means to support a certain degree of financial independence for every level of government. Thus, with the passing of time a conflict was created between the spirit of the Constitution and the prevailing facts. Instead of interdependence among the three levels of government a large degree of dependence has been promoted, which runs counter to the original intent of the Founding Fathers and also against the very essence of a normal functioning of a democratic system.

Since 1913 when the graduated income tax was introduced the federal government has been taking the lion's share of the major source of public income. Consequently the state and local governments are left with insufficient sources of revenue. This is a basic fact with which we should start any discussion.

A more equitable distribution of public income among the three levels of government is what is needed to solve the long-range aspect of the financial crisis of our cities and states and not just a few billion dollars granted by the federal government. This subject needs consideration and further study.

The Ford Foundation has granted $215,000 and the Carnegie Corporation $65,000 for a study to find ways of a more effective role of the states in the federal-state relationship. The project is supposed to take two years of investigation and will be directed by former Governor Terry Sanford of North Carolina at Duke University, Durham, North Carolina. Cooperation also is assured from the faculty members from the University of North Carolina, Princeton University and Duke University. Special attention is to be directed to education because this is an ever-growing expenditure item in the state and local budgets.

13. The Need for an Over-all Program for the Economic Expansion and Financial Stability of Massachusetts

In view of the many economic and financial problems faced by the Commonwealth in recent years, it seems desirable to utilize the current period of relatively full employment to reappraise our goals and the means and policies best designed to achieve the type of economy and society we wish to live in. One product of such a reappraisal might well be an economic inventory and program which would consider the available strengths, resources and unused potentials of the Commonwealth and determine the preferred steps for assuring their full utilization. The development of such an inventory and program would require the work and cooperation of many agencies of government and of private institutions. To be fully effective, it might also require a considerable restructuring of the Commonwealth's budget (including that of cities and towns) so as to provide necessary program information (in addition to administrative data). Today it is virtually impossible to obtain on a state-wide basis the needs and financial expenditures of such public programs as education, health, conservation, etc.

It is clear that to be useful, a Commonwealth inventory and program must combine both state and municipal data in order to provide a realistic picture of the whole. Any program, likewise, must apply to both the state and municipal level. There is abundant evidence that the affairs and interests of the two are inseparable and that dealing with one without regard to the other can be fatal to the economy. For example, there seems to be little doubt that undue emphasis on the local property taxes has had, and will continue to have, a depressing impact on the growth and expansion of manufacturing enterprises and manufacturing jobs.

Because of the magnitude of this undertaking, (which is well beyond the capacity of this Board under its current austere budget) and especially if it involves major changes in, and the integration of, state and local budgeting procedures, we believe that the project deserves careful preliminary study and definition. With this in mind we urge the Governor to appoint an *ad hoc* committee composed of three representatives of the state government, three of municipal governments, three from county governments and independent commissions, plus two each from business and labor interests to consider the feasibility of such an inventory and program and to define its scope and content. The committee should also examine the question of state-wide program budgeting and indicate its views as to whether budget restructuring is necessary in order to provide adequate program information. The Committee should be allowed approximately eight months for its task and should avail itself of appropriate technical advice as needed. A member of this Board might well be designated as one of the state members of the Committee.

14. In Search for the Optimum Level of Output, Income and Employment

The major task of the Commonwealth's economy is to create and maintain favorable conditions under which the available factors and resources can be used to the optimum by free competitive enterprises and in the environment of a free society. The optimum level of accumulation of capital, of investment, of income and thereby employment lies at the point where the largest majority of consumers and producers are satisfied.

The government should not need to interfere in the daily economic process once it has established an adequate framework of an institutional and legal nature. Theoretically, the free enterprise system can work to produce the fruits of the optimum level of production if this adequate framework is provided. If the required framework is not provided, or if it has serious gaps and weaknesses the lesson of modern economic history is that free enterprise cannot produce all the potential fruits. The assistance of the government in establishing an adequate institutional and legal framework for a normal functioning of the free enterprise system is indispensable. Beyond this point, government must see that the rules of the game are respected by all concerned. The "free enterprise" philosophy without an adequate framework and the steady authority of the government to check on the actual application of the rules involved has no meaning for a modern society. The question of what framework should be erected is a central issue in Economics.

Furthermore, the free enterprise system was never conceived to solve the specific problems of the government. What the majority of the people want but cannot achieve by individual or private association certainly constitutes legitimate government business. No one claims that national defense, administration of justice, police and order, social peace, a minimum requirement of education and public health or recreational facilities are not included in the legitimate domain of government activity. Of course we do have a problem in our country regarding the division of tasks and powers among the Federal, the State and the local government, but that is more of a constitutional than an economic issue. It is also clear that in order to reach the optimum level of production in the private sector of the economy, conditions for financial stability of the government at all levels should be given.

One basic function of the government is to make sure that, given an effective demand, the economic framework affords producers a chance to realize a normal return or rate of profit equal to the cost of management besides the cost of capital invested (actually paid or imputed), the cost of labor, the cost of land and taxes. It is not a question of the government guaranteeing to any factor a certain rate of return but rather assembling and fostering that institutional framework and that climate in which any sort of business for which there is a demand can survive and grow under reasonably competent management.

The other basic function of the government in economic life is to assure that consumers have an opportunity to earn a level of income, high enough to cover basic needs, to meet prevailing standards of living and also to save a sufficient portion of their current income so as to improve their future living conditions. Again the point here is not that government guarantees to any group of individuals a certain level of income. That would be misleading because in the long-run if the aggregate of real income does not increase then whatever extra a group would receive represents a loss for another group; thus in the end poverty instead of affluence will spread. The task of the government in a free society is, as mentioned above to improve the institutional framework and the business climate to such an extent that every consumer capable of working should have an incentive and a chance to earn a decent living for himself and his family.

The spelling out of the economic philosophy is very important because only then do we know in what direction we want to go and realize what we need to achieve our goals. The government of the Commonwealth does not have the means or the legal prerogatives to guide or control the economy according to a predetermined plan, but our government has sufficient authority to improve the business climate and to ask vigorously and propose to the General Court those long-needed reforms to make Massachusetts a place of really good business and good living for all. This requires not so much that more money be spent by our government but rather a new spirit of cooperation and dedication to the common good. We need a government closer to the people and their daily economic activity.

15. The Concept of Economic Policy and the Quest for Direction

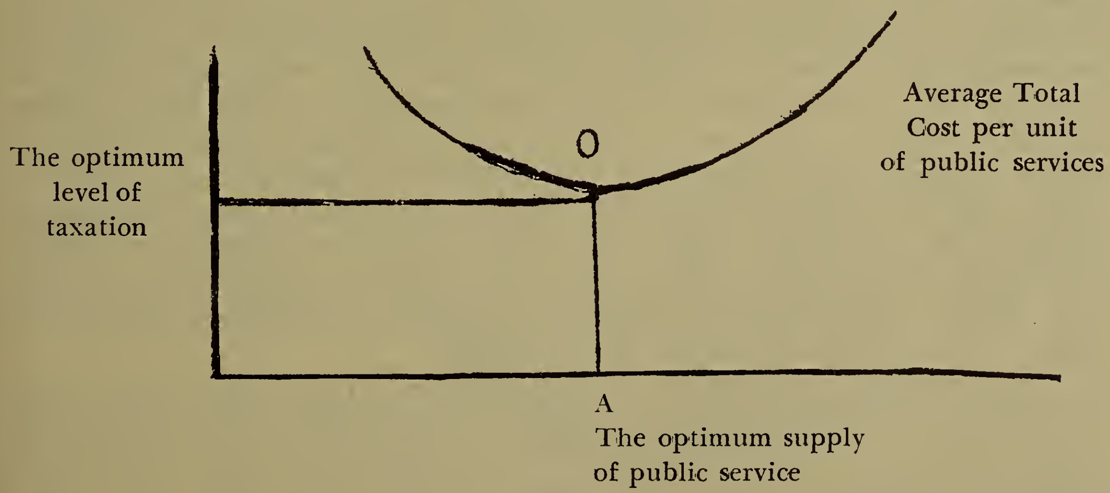
By definition "policy" means any course of action or reform on the part of government or any other institution to implement a certain decision for changing institutions or procedures within the given socio-economic framework or introducing a new order of things. Consequently, a given policy may have the purpose either to adjust actual conditions of the existing order or to re-orient existing institutions and procedures in the light of a new, future order. We are living in an era of rapid change and thus the quest for a correct understanding of the concept of policies we want to use is of paramount importance. Here we are concerned only with the subject of policy making at the government level.

The prerogatives to make and apply policies, that is, the decision to make changes in human affairs of an organized society, may result in success and progress (the right kind of policies) but also may become a source of trouble and unnecessary sacrifices on the part of the people (the wrong kind of policies). The very distinction between *right* and *wrong* kinds of policies requires the acceptance and use of certain definite standards. With the help of these standards we can make value judgments based on certain objective conditions and not simply on personal opinion.

In politics there is a continuous struggle between and among policies proposed all with the same intention of solving given problems. Often, however, it is not clear why an opponent of a policy rejects it, except that the policy was originated by an adverse political group. The task of a scientist serving as an advisor is to clarify such arguments to the point where the public can see the real nature of the argument.

There are two objective standards that can be used to ascertain whether a given policy is to be accepted or rejected on grounds other than personal likes and dislikes. These standards are: 1) Efficiency and 2) Consistency. Each needs a few words of explanation.

The standard of efficiency requires that a given policy should be suitable to attain a certain goal by the use of the least amount of necessary sacrifice or expense. This is the application of the principle of rationalized action or minimum of effort. Many policies may be conducive to the achievement of a given goal but only one would satisfy the condition of the least cost which in practice means the least amount of public burden or the lowest possible level of taxation. In one word, when this condition is satisfied we have a "policy of the optimum" because it offers to the people the maximum amount of public services at the minimum cost. The familiar "U" shaped curve in this case would be applicable to both the private and the public sector of the economy.



Professional economists and statisticians are needed by government to calculate the cost of government supplied services in seeking to determine the point at which the optimum level has been reached or is close to it.

Whenever the government spends beyond the optimum it means waste of available resources, both in natural and human factors. From that point on taxation becomes oppressive or in economic terms depressive. Indeed, excessive taxation is a deterrent to economic progress in a free society by restricting private investment and thus making impossible the achievement of the optimum level of income and employment in the private sector. Public services offered in an amount larger than indicated by point A on the chart are nothing but implementation of "rob-Peter-to-pay-Paul" type policies. In the long-run such policies would discourage those who strive to be efficient, and thus the G.N.P. calculated in stable dollars would either stagnate or grow at a lower or insufficient rate. Decline rather than progress would be the future of such a community.

To determine where the government of the Commonwealth stands on the above mentioned chart poses a problem not easily deciphered but nevertheless not insoluble. Let us take the example of any of our giant corporations which face the same problem of trying practically to get as close as possible under the given conditions to the optimum level of output and income. If they do a good job in approaching this optimal point, it means that they are able to satisfy with their product or service—both in terms of price and quality—the largest possible number of consumers. The optimum level of output and income offers the maximum return to producers and the maximum satisfaction or utility to consumers. The invisible force which helps these fruits to materialize is "competition on both sides," or in other words, the desire to be most efficient, each in his own way under the conditions of free choice in a free society. One point not always mentioned as indispensable is that the monetary and banking systems must be stable in order to satisfy the requirements for an adequate framework where competition or the law of supply and demand will be able to work to the optimal point.

In the public sector of a free society where the government is in business we have public goods or services which are offered to the citizens at a certain cost or level of taxation, we might say in competition with other states. Indeed, those not satisfied with the performance of the government of the Commonwealth may move into another part of the country. There is also competition between the political party in power and those in opposition during elections. Unfortunately our people are not sufficiently versed in Economics to make this competition continue to work after the elections or work more perfectly during the elections. This does not however, mean that our elected officials with the help of expert advice from professional economists and statisticians could not orient and lead the administration of public services toward the achievement of the optimum level where the maximum amount of public goods are offered at the least cost or the lowest possible level of taxation. Then, and only then, can we say that the standard of efficiency in regard to our government has been satisfied.

The optimum results of a given policy require that the second standard—consistency—also be satisfied. The application of this standard refers to the quest for direction. A particular policy applied in practice represents a force which sooner or later will press on the existing society and economy to move in a certain direction or to stand still by preserving the status quo. Often we hear the question: "Where are we going from here?", which is the same as asking: "In what kind of society or economy do we want to live?" As Justice Oliver Wendel Holmes put it: "The greatest thing in the world is not so much where we stand as in what direction we are moving." How right was Justice Holmes in this respect. We cannot hope to achieve something of value and durable stature if we do not know before-hand the direction in which we want to go. The quest for direction is the same as the decision for the ultimate goals and values. As long as we Americans believe in and stand for more freedom, justice, social peace and stability, we have a very definite direction to follow, namely toward a more perfect type of free society. It means that all our particular policies at all levels of government should be oriented to, and consistent with, the standard of those ultimate values just mentioned—values which constitute our way of life. The rule then is that a given policy is to be rejected *not* only when it is proved to be inefficient on technical grounds but also when it runs counter to our way of life or to the accepted model of society and economy we wish to live in.

The time has come to be seriously concerned with the quest for direction not alone on the ground that certain policies may endanger our way of life but also for the basic reason that being inconsistent with our ultimate goals and values, such policies in their implementation cannot be completely successful; in the long run they become less and less efficient. Often we can see how a policy or legislation originally accepted only on technical terms of efficiency, later turns out to be either a fiasco by leaving the problem unsolved, or worse, by creating new, additional problems. In most cases such an inadequate policy in its conception did not satisfy the standard of consistency. And in a free society any kind of public policy in order to be successful requires a high degree of cooperation on the part of a large majority of the people, which is synonymous with the requirement of a high degree of consistency with the overall set of ultimate values given for that society.

If we want to do something constructive for present and future generations we must decide beforehand where we want to go from our present day conditions. But where are we at this moment? For the country as a whole the issue is whether our mixed American economic system is more competitive or more monopolistic. This subject has been discussed for more than three decades, and the 66th annual meeting of the American Economic Association held in December 1953, was devoted almost entirely "to assess the fundamental nature of the American economy at the current point in time."[1]

The result of this great debate about the nature of our mixed economic system has not yet been concluded. A group of prominent economists maintain that in our mixed system competitive forces prevail, since otherwise we could not explain the high degree of affluence and the abundance of goods and services on our markets.

Another group, also composed of first rank economists, argues that in our mixed system not competition but monopolistic forces prevail, and that is why we have so many social problems.

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[1] Foreward, Papers and Proceedings of the 66th Annual Meeting of the American Economic Association, Washington, D. C., December 28-30, 1953. The American Economic Review, May, 1954.

In Massachusetts we have not yet had a great debate about the direction in which we want to move from the present status but that does not mean that the issue is non-existent. Every expert knows that a recommended solution or policy cannot work effectively and satisfactorily unless certain conditions are given. Those conditions refer to the structural framework of society or the socio-economic model which has to be consistent with the proposed policy. The right kind of policy, therefore must satisfy both the standard of efficiency and that of consistency. Consequently, the quest for direction or consistency has to be explicitly included in the process of conception and implementation of public policies, if they are to be entirely successful. In fact, the technical side (efficiency) and the socio-economic framework (consistency) are inseparable for any complete solution of a given problem. New vistas in the field of expertise may be opened following this thought.

The future expert will have to indicate not only the immediate or short-run effects but also the long-run consequences or the direction which is consistent with his recommendations. The neutrality of the man of science in the old Weberian sense when he was supposed to be concerned with just actuality, probably and by necessity, has to end. The professional economist of today cannot complete his work by assuming to be divorced from the social aspects as soon as he leaves the domain of pure theory and goes into matters of policy or practical application. In the atomic age both the social and the natural scientist have a moral obligation towards their society as well as toward humanity to consider in their work not only the immediate effects but also the future of whatever they have to offer. The point here is not to give to the scientist the task of being a prophet. It is only a question of indicating the direction in which a given policy or discovery will lead. This is not an insoluble task if we agree that there are only two basic directions where practically every particular policy and reform leads: either toward a more perfect type of free society—the "Great Free Society"—or toward a more complete type of Government-controlled society. The crux of the matter is that no one but a professional expert knows enough to see with clarity the relationship between the technical side of a recommended policy or reform and its social, economic and political implications.

Here, for debate, a most urgent issue is raised by the scientific revolution of our time. In almost every field no public action is taken today without the advice and recommendations of some scientist or group of experts. It is encouraging to see lately more and more concern with this issue. Recently the Ford Foundation granted an $8 million fund to M.I.T. to explore and expand the new field of international education and research activities or the impact of technology on human life and welfare. The announcement of this new venture by M.I.T. spells out the concern about the very same issue raised above, namely, the new moral responsibility of scientists toward their fellow men: "Changes in the life of the average citizen, in the focus of attention of the government policy maker, in the preoccupation of the businessman, in the whole fabric of human society brought about by the advance of technology are obvious. But all of these suggest that an institution whose central task in the past has been promotion of scientific and technical advance has an opportunity and responsibility to extend its efforts towards understanding the impact of this advance on the human community, now inevitably a world, and not a national community.[2]

In a free society like ours one may argue about the right means. But the issue of the new moral responsibility of a professional economist or a natural scientist is there and we cannot escape the consequences by ignoring it. The question "Where are we going from here?" needs an explicit answer because it is at the bottom of all the issues and all the problems of our days, here in Massachusetts, in the rest of the Nation and in the whole world.

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[2] "Scientists Feel Moral Obligation," Sumner Barton, *Boston Globe,* January 30, 1966.

APPENDIX

TABLE 1

THE POPULATION OF MASSACHUSETTS
(in thousands)

1910	3,366
1920	3,852
1930	4,250
1940	4,317
1950	4,691
1955	4,882
1956	4,891
1957	4,929
1958	5,010
1959	5,117
1960	5,158
1961	5,204
1962	5,232
1963	5,296
1964	*5,338* *(provisional)*

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, pp. 11-12.

TABLE 2

POPULATION PERCENT INCREASE

	Massachusetts	*New England*	*United States*
1910 to 1920	14.4	12.9	15.0
1920 to 1930	10.3	10.3	16.2
1930 to 1940	1.6	3.3	7.3
1940 to 1950	8.7	10.4	14.5
1950 to 1960	9.8	12.8	18.5

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, pp. 11-12.

TABLE 3

POPULATION PER SQUARE MILE

	Massachusetts	*New England*	*United States*
1910	418.8	105.7	26.0
1920	479.2	119.4	29.9
1930	537.4	129.2	34.7
1940	545.9	133.5	37.2
1950	596.2	147.5	42.6
1960	654.5	166.5	50.5

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, pp. 11-12.

TABLE 4

MASSACHUSETTS POPULATION BY AGE: 1960
(in thousands)

Under 15 years	1,480
15 to 24 years	656
25 to 34 years	632
35 to 44 years	698
45 to 64 years	1,110
65 and over	572
21 and over	3,345

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, p. 22.

TABLE 5

MASSACHUSETTS POPULATION BY SEX (1940-1960) AS COMPARED WITH NEW ENGLAND AND THE U. S.
(in thousands)

			Males per 100 Females		
	Male	*Female*	*Mass.*	*New England*	*U. S.*
1940	2,102	2,214	95.0	97.0	100.8
1950	2,270	2,420	93.8	95.7	98.7
1960	2,486	2,662	93.4	95.0	97.1

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, p. 21.

TABLE 6

MASSACHUESTTS POPULATION BY RACE

	White	*Negro*	*Other Races*
1940	4,257,596	55,391	3,734
1950	4,611,503	73,171	5,840
1960	5,023,144	111,842	13,592

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census. Washington, D. C., 1965, p. 26.

TABLE 7

NATIVITY AND PARENTAGE OF THE FOREIGN WHITE STOCK IN MASSACHUSETTS, 1950 AND 1960 (in thousands)

	1950	*% of U. S. = 100*	*1960*	*% of U. S. = 100*
Foreign White Stock	2,273	6.7	2,033	6.1
Foreign Born			565	
Native of Foreign or Mixed Parentage			1,468	
Country of Origin:				
Canada	602		545	
Germany	55		55	
Ireland	366		276	
Italy	329		311	
Poland	147		137	
United Kingdom	208		193	
U. S. S. R.	144		129	

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, p. 28 and *The 1950 and 1960 Census of Population,* Characteristics of the Population, Vol. 23, Massachusetts.

TABLE 8

MASSACHUSETTS AND U. S. POPULATION URBAN AND RURAL 1950 AND 1960 (in thousands)

Massachusetts:	*1950*	%	*1960*	%
Urban	3,959	84.4	4,303	83.6
Rural	731	15.6	846	16.4
Nonfarm	651	13.8	810	15.7
Farm	80	1.8	36	0.7
TOTAL	4,690	100.0	5,149	100.0
United States:	*1950*	%	*1960*	%
Urban	96,847	64.0	125,284	69.9
Rural	54,479	36.0	54,042	30.1
Nonfarm	31,431	20.7	40,597	22.6
Farm	23,048	15.3	13,445	7.5
TOTAL	151,326	100.0	179,326	100.0

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, p. 16.

TABLE 9

MOBILITY STATUS OF THE MASSACHUSETTS POPULATION, 1950 AND 1960

(in thousands)

Residence in 1949:	
Total population, 1 year old and over, 1950	4,590
Same house as in 1950	4,029
Different house, same county	329
Different county or abroad	165
Residence not reported	66
Residence in 1955:	
Total population, 1 year old and over, 1960	4,601
Same house as in 1960	2,603
Different house, same county	1,293
Different county or abroad	623
Residence not reported	81

Source: *Statistical Abstract of the United States, 1965,* 86th Annual Edition. U. S. Bureau of the Census, Washington, D. C., 1965, p. 33.

TABLE 10

Capital Spending Plans of Massachusetts Manufacturers

(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*1964-1965 Percent Change*	*Percent Change 1965-1966*
All Manufacturing	$282,775	$318,511	$384,331	12.6	20.6
Durable Goods	135,575	171,736	188,978	26.7	10.0
Ordnance	2,620	3,942	3,871	50.4	— 1.8
Primary Metals	11,169	12,115	8,868	8.5	—26.8
Fabricated Metals	24,230	23,597	15,055	— 2.6	—36.2
Machinery	31,106	47,883	40,989	53.9	—14.4
Electrical Machinery	22,848	24,249	47,940	6.1	97.7
Transportation Equipment	8,789	15,974	8,291	81.7	—48.1
Instruments	22,580	30,661	54,853	35.8	78.9
Lumber and Wood Products	1,882	1,477	1,199	—18.9	—18.8
Furniture	2,533	3,460	690	37.0	—80.1
Stone, Clay and Glass	7,878	8,368	7,222	6.2	—13.7
Nondurable Goods	147,200	146,805	195,353	— 0.3	33.1
Food	28,038	20,705	33,045	—26.2	59.6
Textiles	14,490	17,301	22,734	19.4	31.4
Apparel	4,366	5,825	3,582	33.4	—38.5
Paper	31,238	24,672	63,900	—21.0	59.0
Printing	16,150	17,702	12,374	9.6	—30.1
Chemicals	12,004	14,763	7,322	23.0	—50.4
Rubber	17,733	25,268	21,857	42.5	—13.5
Leather and Shoes	8,258	11,093	20,134	34.3	81.5
Miscellaneous	14,923	9,476	10,405	36.5	9.8

Source: Federal Reserve Bank of Boston.

TABLE 11

EXPENDITURES FOR NEW PLANTS
MASSACHUSETTS
(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*Percent Change 1964-1965*	*Percent Change 1965-1966*
All Manufacturing	$57,169	$56,504	$86,714	— 1.2	53.5
Durable Goods	28,442	30,690	36,643	7.9	19.4
Ordnance	197	260	275	32.0	5.8
Primary Metals	2,211	1,454	0	34.2	—100.0
Fabricated Metals	6,130	1,723	0	71.9	—100.0
Machinery	5,226	12,689	5,329	142.8	— 58.0
Electrical Machinery	3,724	1,964	8,629	— 47.3	339.4
Transportation Equipment	1,556	4,393	0	182.3	—100.0
Instruments	5,848	3,833	21,886	— 34.5	471.0
Lumber and Wood Products	91	425	55	367.0	— 87.1
Furniture	765	2,953	0	286.0	—100.0
Stone, Clay and Glass	2,694	996	469	— 63.0	— 52.9
Nondurable Goods	28,727	25,814	50,071	— 10.1	94.0
Food	4,402	0	9,352	——	——
Textiles	2,478	5,606	4,706	126.2	— 16.1
Apparel	144	210	.0	45.8	—100.0
Paper	4,748	3,183	13,035	— 33.0	309.6
Printing	3,408	3,894	3,440	14.3	— 11.7
Chemicals	2,629	1,373	447	— 47.8	— 67.4
Rubber	2,181	2,552	2,104	17.0	21.6
Leather and Shoes	2,007	8,996	15,986	348.2	77.7
Miscellaneous	6,730	0	0	——	——

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

TABLE 12

EXPENDITURES FOR NEW MACHINERY AND EQUIPMENT
MASSACHUSETTS

(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*Percent Change 1964-1965*	*Percent Change 1965-1966*
All Manufacturing	$225,606	$262,036	$297,617	16.1	13.6
Durable Goods	107,133	141,046	152,335	31.7	8.0
Ordnance	2,423	3,682	3,596	52.0	— 2.3
Primary Metals	8,958	10,561	8,868	19.0	— 16.8
Fabricated Metals	18,100	21,874	15,055	20.8	— 31.2
Machinery	25,880	21,194	15,660	36.0	1.3
Electrical Machinery	19,124	22,285	39,311	16.5	76.4
Transportation Equipment	7,233	11,581	8,291	60.1	— 28.4
Instruments	16,732	26,828	32,967	60.3	22.7
Lumber and Wood Products	1,731	1,052	1,144	—39.2	8.7
Furniture	1,768	517	690	—70.8	33.5
Stone, Clay and Glass	5,184	7,372	6,753	42.2	— 8.4
Nondurable Goods	118,473	120,890	145,282	2.1	20.1
Food	23,636	20,705	23,693	—12.4	14.4
Textiles	12,012	11,695	18,028	— 2.6	54.2
Apparel	4,222	5,615	3,582	33.0	— 36.2
Paper	26,490	21,489	50,864	—18.9	136.7
Printing	12,742	13,808	8,934	8.4	— 35.3
Chemicals	9,375	13,390	6,875	42.8	— 48.7
Rubber	15,552	13,390	16,753	46.1	— 17.4
Leather and Shoes	6,251	2,097	4,148	—66.5	97.8
Miscellaneous	8,193	9,476	10,405	15.7	9.8

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

TABLE 13

EXPANSION VERSUS REPLACEMENT SPENDING
MASSACHUSETTS
(Percent of Total)

	Expansion		*Replacement*	
Industry	*1964 Actual*	*1965 Revised*	*1964 Actual*	*1965 Revised*
All Manufacturing	42.5	38.2	57.5	61.8
Durable Goods	38.0	42.6	62.0	57.4
Ordnance	21.7	6.6	78.3	93.4
Primary Metals	39.9	51.9	60.1	48.1
Fabricated Metals	40.7	37.2	59.3	67.8
Machinery	22.5	55.9	77.5	44.1
Electrical Machinery	31.7	22.6	68.3	77.4
Transportation Equipment	45.6	4.2	54.4	95.8
Instruments	53.4	65.9	46.6	34.1
Lumber and Wood Products	39.2	22.5	60.8	77.5
Furniture	34.1	85.4	65.9	14.5
Stone, Clay and Glass	57.1	16.0	42.9	84.0
Nondurable Goods	46.9	33.2	53.1	66.8
Food	44.6	7.5	55.4	92.5
Textiles	33.1	13.2	66.9	86.8
Apparel	41.9	0.5	58.1	99.5
Paper	40.8	21.4	59.2	77.8
Printing	53.6	71.2	46.4	28.8
Chemicals	33.3	34.1	66.7	65.9
Rubber	56.5	53.0	43.5	47.0
Leather and Shoes	33.1	90.0	66.9	9.9
Miscellaneous	72.0	0.0	28.0	100.0

Source: Federal Reserve Bank of Boston.

TABLE 14

SALES EXPECTATIONS IN 1965
FOURTH QUARTER VS. PRIOR QUARTERS
MASSACHUSETTS

	Increase	*Stayed the Same*	*Decrease*
All Industries			
Number of Firms	42	56	20
Percent of total	36	47	17
Durable Goods			
Number of Firms	21	29	6
Percent of total	37	52	11
Nondurable Goods			
Number of Firms	21	27	14
Percent of total	34	44	22

Source: Federal Reserve Bank of Boston.

TABLE 15

SALES EXPECTATIONS IN 1966 VS. 1965
MASSACHUSETTS

All Industries	*Increase*	*Stayed the Same*	*Decrease*
Number of Firms	59	37	22
Percent of total	50	31	19
Durable Goods			
Number of Firms	33	19	4
Percent of total	59	34	7
Nondurable Goods			
Number of Firms	26	18	18
Percent of total	42	29	29

Source: Federal Reserve Bank of Boston.

TABLE 16

CAPACITY — RATES OF OPERATION
Comparison of Capacity Utilization
of Massachusetts Manufacturers Sampled
(End of 1964 vs. Fall of 1965)

Industry	*Capacity Utilization End of 1964*	*Capacity Utilization End of 1965*
All Manufacturing	86	88
Durable Goods	84	85
Primary Metals	74	89
Fabricated Metals	68	84
Machinery	92	92
Electrical Machinery	86	85
Transportation Equipment	83	79
Instruments	96	94
Lumber and Wood Products	56	61
Furniture	75	78
Stone, Clay and Glass	85	85
Nondurable Goods	87	92
Food	82	96
Textiles	92	87
Apparel	88	94
Paper	87	92
Chemicals	86	84
Rubber	74	80
Leather and Shoes	87	80
Miscellaneous	78	90

TABLE 17

CAPITAL SPENDING PLANS OF NEW ENGLAND MANUFACTURERS
(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*Percent Change 1964-1965*	*Percent Change 1965-1966*
All Manufacturing	$688,814	$811,436	$954,199	+17.8	+17.6
Durable Goods	368,123	408,290	514,063	+10.9	+25.9
Ordnance	4,737	6,095	5,985	+28.7	+ 1.8
Primary Metals	51,452	56,510	43,287	+ 9.8	—23.4
Fabricated Metals	56,887	45,489	49,310	—20.0	+ 8.4
Machinery	83,176	98,892	107,199	+18.9	+ 8.4
Electrical Machinery	53,913	59,335	93,156	+10.0	+57.0
Transportation Equipment	41,315	65,098	104,157	+57.6	+60.0
Instruments	40,953	39,988	70,139	— 2.4	+75.4
Lumber and Wood Products	12,365	12,007	11,130	— 3.9	— 7.3
Furniture	5,126	6,854	1,370	+33.7	—80.0
Stone, Clay and Glass	18,199	18,022	28,330	— 1.0	+57.2
Nondurable Goods	320,691	403,146	440,136	+25.7	+ 9.2
Food	56,077	51,062	59,845	— 9.0	+17.2
Textiles	5,263	6,917	4,365	+31.4	—36.9
Apparel	32,431	37,786	45,457	+16.5	+20.3
Paper	89,265	119,152	162,881	+33.5	+36.7
Printing	34,836	51,061	20,424	+46.6	—60.0
Chemicals	23,845	36,266	14,918	+52.1	—58.4
Rubber	37,465	49,046	59,046	+30.9	+21.1
Leather and Shoes	12,774	22,419	43,403	+75.5	+93.6
Miscellaneous	28,744	29,437	29,437	+ 2.4	0.0

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

Expenditures for New Plants
New England
(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*Percent Change 1964-1965*	*Percent Change 1965-1966*
All Manufacturing	$149,583	$149,586	$252,554	0.0	+ 68.8
Durable Goods	73,990	65,739	137,841	— 11.2	+109.7
Ordnance	1,094	402	425	— 63.3	+ 5.7
Primary Metals	8,644	1,978	3,290	— 77.1	+ 66.3
Fabricated Metals	14,734	3,730	5,523	— 74.7	+ 48.1
Machinery	15,055	20,075	31,516	+ 33.3	+ 57.0
Electrical Machinery	9,688	7,714	17,886	— 20.4	+131.9
Transportation Equipment	3,842	15,558	31,247	+304.9	+100.8
Instruments	10,238	4,718	27,074	— 53.9	+473.8
Lumber and Wood Products	3,994	2,750	6,233	— 31.2	+126.6
Furniture	1,225	5,840	0	+376.7	—100.0
Stone, Clay and Glass	5,476	2,974	14,647	— 45.7	+392.5
Nondurable Goods	75,593	83,847	114,713	+ 10.9	+ 36.8
Food	13,786	9,651	19,390	— 30.0	+100.9
Textiles	13,880	6,839	6,546	— 50.7	— 4.3
Apparel	254	242	0	— 4.7	—100.0
Paper	18,236	16,324	33,228	— 10.5	+103.6
Printing	5,295	18,178	5,453	+243.3	— 70.0
Chemicals	6,557	4,243	1,253	— 35.3	— 70.5
Rubber	6,293	7,210	12,535	+ 14.6	+ 73.8
Leather and Shoes	2,389	16,568	33,247	+593.5	+100.7
Miscellaneous	8,903	4,592	3,061	— 48.4	— 33.4

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

TABLE 19

Expenditures for New Machinery and Equipment
New England

(in thousands of dollars)

Industry	*1964 Actual*	*1965 Revised*	*1966 Planned*	*Percent Change 1964-1965*	*Percent Change 1965-1966*
All Manufacturing	$541,670	$661,850	$701,645	+22.2	+ 6.0
Durable Goods	292,445	342,551	376,222	+17.1	+ 9.8
Ordnance	3,643	5,693	5,560	+56.3	— 2.3
Primary Metals	42,808	54,532	39,997	+27.4	—26.7
Fabricated Metals	42,153	41,759	43,787	— 0.9	+ 4.8
Machinery	68,121	78,817	75,683	+15.7	— 4.0
Electrical Machinery	45,046	51,621	75,270	+ 4.6	+45.8
Transportation Equipment	37,473	49,540	72,910	+32.2	+47.1
Instruments	30,715	35,270	43,065	+11.5	+22.1
Lumber and Wood Products	8,371	9,257	4,897	+10.6	—47.1
Furniture	3,901	1,014	1,370	—74.1	+35.1
Stone, Clay and Glass	10,214	15,048	13,683	+47.3	— 9.1
Nondurable Goods	249,225	319,229	325,423	+28.1	+ 1.9
Food	42,715	41,411	40,445	— 3.1	— 2.3
Textiles	18,551	30,947	38,991	+66.8	+25.7
Apparel	5,523	6,675	4,365	+20.8	—34.6
Paper	29,541	32,883	14,971	+11.3	—54.5
Printing	17,288	32,023	13,665	+85.2	—47.3
Chemicals	73,866	102,828	129,653	+39.2	+26.1
Rubber	31,163	41,836	46,871	+34.2	+12.0
Leather and Shoes	10,385	5,851	10,156	—43.7	+73.6
Miscellaneous	20,193	24,845	26,376	+23.0	+ 6.2

NOTE: Individual industry data are estimated from very small samples.

Source: Federal Reserve Bank of Boston.

TABLE 20

EXPANSION VERSUS REPLACEMENT SPENDING
NEW ENGLAND
(Percent of Total)

Industry	*Expansion* 1964 *Actual*	*Expansion* 1965 *Revised*	*Replacement* 1964 *Actual*	*Replacement* 1965 *Revised*
All Manufacturing	39.6	45.5	60.4	54.5
Durable Goods	37.8	42.6	62.2	57.4
Ordnance	16.6	6.6	83.4	93.4
Primary Metals	44.5	48.9	55.5	51.1
Fabricated Metals	38.5	39.8	61.5	60.2
Machinery	28.5	47.4	71.5	52.6
Electrical Machinery	35.8	35.0	64.2	65.0
Transportation Equipment	33.0	20.0	67.0	80.0
Instruments	47.9	62.6	52.1	37.4
Lumber and Wood Products	57.2	53.4	42.8	46.6
Furniture	37.3	85.4	62.7	14.6
Stone, Clay and Glass	47.9	56.0	52.1	44.0
Nondurable Goods	41.6	48.5	58.4	51.5
Food	46.3	31.3	89.7	88.2
Textiles	10.9	11.8	89.1	88.2
Apparel	42.7	66.4	57.3	33.6
Paper	42.7	66.4	67.3	87.1
Printing	47.1	62.5	52.9	37.5
Chemicals	37.5	40.4	62.5	59.6
Rubber	56.1	54.3	43.9	45.7
Leather and Shoes	28.6	76.6	71.4	23.4
Miscellaneous	49.3	15.6	50.7	84.4

Source: Federal Reserve Bank of Boston.

TABLE 21

SALES EXPECTATIONS IN 1965
FOURTH QUARTER VS. PRIOR QUARTER
NEW ENGLAND

All Industries	*Increase*	*Stayed the Same*	*Decrease*
Number of Firms	87	86	38
Percent of Ttal	41	41	18
Durable Goods			
Number of Firms	45	41	27
Percent of Total	40	36	24
Nondurable Goods			
Number of Firms	42	45	11
Percent of Total	43	46	11

Source: Federal Reserve Bank of Boston.

TABLE 22

SALES EXPECTATIONS IN 1966 VS. 1965
NEW ENGLAND

	Increase	*Stayed the Same*	*Decrease*
All Industries			
Number of Firms	123	61	18
Percent of Total	61	30	9
Durable Goods			
Number of Firms	65	32	9
Percent of Total	62	30	8
Nondurable Goods			
Number of Firms	58	29	10
Percent of Total	60	30	10

Source: Federal Reserve Bank of Boston.

TABLE 23

CAPACITY — RATES OF OPERATION
Comparison of Capacity Utilization
of New England Manufacturers Sampled
(End of 1964 vs. Fall of 1965)

Industry	*Capacity Utilization End of 1964*	*Capacity Utilization End of 1965*
All Manufacturing	83	84
Durable Goods	81	82
Primary Metals	83	87
Fabricated Metals	82	88
Machinery	87	83
Electrical Machinery	83	85
Transportation Equipment	64	63
Instruments	90	93
Lumber and Wood Products	84	89
Furniture	76	79
Stone, Clay and Glass	79	81
Nondurable Goods	85	87
Food	83	83
Textiles	91	91
Apparel	86	92
Paper	92	92
Printing	81	84
Chemicals	75	81
Rubber	88	95
Leather and Shoes	88	92
Miscellaneous	72	63

Source: Federal Reserve Bank of Boston.

TABLE 24

MASSACHUSETTS WORK FORCE SUMMARY, SELECTED YEARS
(in thousands of people)

Item	*1964*	*1960*	*1955*	*1951*	*1950*
The Work Force	2,329.3*	2,297.2*	2,127.9	2,143.0	INA
Unemployment	129.5*	123.0*	94.9	101.8	INA
The Unemployment Rate	5.6%	5.4%	4.5%	4.8%	INA
Total Employment	2,199.3	2,170.0	2,030.4	2,039.0	1,985.6
Nonagricultural Wage and Salary	1,963.4	1,916.7	1,818.3	1,832.8	1,761.4
Manufacturing	647.3	698.0	700.0	746.9	715.9
Durable goods	304.7	324.5	294.3	307.5	268.1
Electrical machinery, equipment and supplies	83.8	98.6	81.9	77.7	64.7
Nondurable goods	342.6	373.5	406.4	439.4	447.8
Textile mill products	39.6	48.8	69.7	108.0	118.9
Apparel and related products	56.8	60.1	60.3	58.6	57.4
Leather and related products	48.3	50.1	69.2	67.2	72.0
Nonmanufacturing	1,316.1	1,218.7	1,117.6	1,075.9	1,045.5
Finance, insurance and real estate	106.2	99.5	88.4	79.9	77.3
Wholesale and retail trade	403.3	386.6	367.9	362.9	353.2
Service, miscellaneous, and mining	348.4	294.4	243.3	222.7	216.4
Government	269.9	249.1	221.3	213.7	208.1
All Other Nonagricultural	219.4	233.3	191.1	194.4	202.4
Agricultural	16.5	20.0	21.0	21.8	21.8
Labor Dispute	0.5	4.2	2.6	2.6	.0

* Revised in November, 1965:	2,331.9	2,288.8
	132.1	144.6
	5.7%	5.6%

Source: Supplement No. 1 to Employment and Unemployment in Massachusetts, A Work Force Report, 1950-1964. Commonwealth of Massachusetts, Division of Employment Security, November, 1965.

Source: Employment and Unemployment in Massachusetts, A Work Force Report, 1950-1964.

TABLE 25

MASSACHUSETTS WORK FORCE SUMMARY, SELECTED YEARS
(in thousands of people)

Item	*Percent Change to 1964 from:* *1960*	*1955*	*1951*	*1950*
The Work Force	+1.4*	+9.5	+8.7	INA
Unemployment	+5.3*	+36.5	+27.2	INA
The Unemployment Rate	——	——	——	——
Total Employment	—1.4	+8.3	+7.9	+10.8
Nonagricultural Wage and Salary	+2.4	+8.0	+7.7	+11.5
Manufacturing	—7.3	—7.6	—13.3	—9.6
Durable goods	—6.1	+3.5	—.9	+13.7
Electrical Machinery, equipment and supplies	—15.2	+2.1	+7.6	+29.2
Nondurable goods	—8.3	—15.7	—22.0	—23.5
Textile mill products	—18.9	—43.2	—63.5	—66.4
Apparel and related products	—5.5	—5.8	—3.1	—1.0
Leather and leather products	—18.3	—30.2	—28.1	—32.9
Nonmanufacturing	+8.0	+17.8	+22.3	+25.9
Finance, insurance and real estate	+6.7	+20.1	+32.9	+37.4
Wholesale and retail trade	+4.3	+9.6	+11.1	+14.2
Service, miscellaneous and mining	+19.3	+43.2	+56.4	+61.0
Government	+8.4	+22.0	+26.3	+29.7
All Other Nonagricultural	—6.0	+14.8	+12.9	+8.4
Agricultural	—17.5	—21.5	—24.3	—24.3
Labor Dispute	——	——	——	——

* Revised in November, 1965: +1.9
+15.3

Source: Supplement No. 1 to Employment and Unemployment in Massachusetts, A Work Force Report, 1950-1964. Commonwealth of Massachusetts, Division of Employment Security, November, 1965.

Source: Employment and Unemployment in Massachusetts, A Work Force Report, 1950-1964.

TABLE 26

Occupations of Employed Workers

			Change from 1950 to 1960:	
Major Occupational Group	*1960 Number*	*1950 Number*	*Number*	*Percent*
Employed Persons—Total	2,000,312	1,826,578	+173,734	+ 9.5
Professional, Technical and Kindred Workers	256,539	187,217	+ 69,322	+37.0
Farmers and Farm Managers	7,763	14,408	— 6,645	—46.1
Managers, Officials and Proprietors (except farm)	153,998	161,445	— 7,447	— 4.6
Clerical and Kindred Workers	325,690	269,989	+ 55,701	+20.6
Sales Workers	146,372	139,236	+ 7,136	+ 5.1
Craftsmen, Foremen and Kindred Workers	279,196	276,363	+ 2,883	+ 1.0
Operatives and Kindred Workers	436,010	478,375	— 42,365	— 8.9
Laborers (except farm and mine)	70,296	87,865	— 17,569	—20.0
Private Household Workers	27,824	29,485	— 1,661	— 5.6
Service Workers (except private household)	171,278	151,448	+ 19,830	+13.1
Farm Laborers and Foremen	8,508	13,928	— 5,420	—38.9
Occupations not reported	116,838	16,819	+100,019	+594.8

Source: Employment and Unemployment in Massachusetts, A Work Force Report, 1950-1964. Commonwealth of Massachusetts, Division of Employment Security, p. 4.

TABLE 27

AVERAGE WEEKLY EARNINGS, HOURS WORKED AND HOURLY EARNINGS OF PRODUCTION WORKERS

	Average Weekly Earnings		*Average Weekly Hours*		*Average Hourly Earnings*	
	Nov. '65	*Nov. '64*	*Nov. '65*	*Nov. '64*	*Nov. '65*	*Nov. '64*
Manufacturing	$100.00	$ 96.20	40.0	40.1	$2.50	$2.40
Durable Goods	111.37	107.90	41.4	41.5	2.69	2.60
Ordnance	107.49	107.44	41.5	42.3	2.59	2.54
Lumber and Wood Products	100.39	94.43	42.9	41.6	2.34	2.27
Furniture and Fixtures	88.58	89.24	41.2	42.7	2.15	2.09
Stone, Clay and Glass	137.38	126.56	43.2	42.9	3.18	2.95
Primary Metal Industries	121.55	118.43	42.5	41.7	2.86	2.84
Fabricated Metal Industries	106.24	102.67	41.5	41.4	2.56	2.48
Machinery (except electrical)	123.98	120.12	42.9	42.9	2.89	2.80
Electrical Machinery	98.40	96.88	40.0	40.2	2.46	2.41
Transportation Equipment	127.44	128.86	39.7	41.3	3.21	3.12
Instruments	104.74	99.14	41.4	40.8	2.53	2.43
Nondurable Goods	91.03	87.36	38.9	39.0	2.34	2.24
Food	99.36	80.78	40.8	40.8	2.36	2.30
Textile Mill Products	83.23	80.78	40.8	40.8	2.04	1.98
Apparel	63.38	60.68	32.5	32.8	1.95	1.85
Paper and Allied Products	111.70	112.75	44.5	44.3	2.51	2.43
Printing and Publishing	112.94	107.91	37.9	37.6	2.98	2.87
Chemicals and Allied Products	132.61	122.40	41.7	43.1	3.18	2.84
Rubber Products	104.39	100.45	41.7	41.0	2.54	2.45
Leather and Leather Products	75.96	74.91	36.0	36.9	2.11	2.03
Miscellaneous Manufacturing	91.96	89.46	41.8	42.2	2.20	2.12

Source: The Commonwealth of Massachusetts, Department of Labor and Industries, Division of Statistics, *Employment Newsletter*, December, 1965.

TABLE 28

UNITED STATES AND MASSACHUSETTS AVERAGE WAGES BY INDUSTRY

Industry	*1964 Production Worker Average Hourly Wage United States*	*1964 Production Worker Average Hourly Wage Massachusetts*
Manufacturing	2.53	2.37
Durable Goods	2.71	2.56
Nondurable Goods	2.29	2.22
Ordnance and Accessories	2.02	2.52
Lumber and Wood Products	2.11	2.19
Furniture and Fixtures	2.05	2.09
Stone, Clay and Glass	2.53	2.85
Primary Metal Industries	3.11	2.76
Fabricated Metal Products	2.67	3.45
Machinery	2.87	2.75
Electrical Equipment	2.51	2.35
Transportation Equipment	3.09	3.04
Instruments and Related Products	2.54	2.40
Food and Kindred Products	2.37	2.31
Textile Mill Products	1.79	1.95
Apparel and Related Products	1.79	1.85
Paper and Allied Products	2.77	2.39
Printing and Publishing	2.97	2.85
Chemicals	2.80	2.85
Rubber and Plastics	2.54	2.44
Leather and Leather Products	1.82	2.02
Miscellaneous Manufacturing	2.08	2.13

Source: The Massachusetts averages are from Employment and Earnings Statistics for States and Areas, 1939 and 1964. U. S. Department of Labor, Bureau of Labor Statistics Regional Office in Boston.

TABLE 29

ESTIMATED TOTAL NONAGRICULTURAL EMPLOYMENT BY INDUSTRIES

	Employment (in thousands)		*Amt. of Change (in thousands)*
	Nov. 1965	*Nov. 1964*	*Nov. '64 to Nov. '65*
NONAGRICULTURAL TOTAL	2,045.3	1,990.5	+54.8
MANUFACTURING TOTAL	673.6	654.6	+19.0
Durable Goods Total	322.7	308.5	+14.2
Ordnance	13.5	14.6	— 1.1
Lumber and Wood Products	5.4	5.3	+ 0.1
Furniture and Fixtures	12.6	12.5	+ 0.1
Stone, Clay and Glass	11.2	10.4	+ 0.3
Primary Metal Industries	22.5	20.9	+ 1.6
Fabricated Metals—Total	40.0	38.9	+ 1.1
Cutlery, Hand tools and Hardware	11.2	10.8	+ 0.4

TABLE 29—Continued

Estimated Total Nonagricultural Employment by Industries

	Employment (in thousands)		*Amt. of Change (in thousands)*
	Nov. 1965	*Nov. 1964*	*Nov. '64 to Nov. '65*
Other fabricated Metals	28.8	28.1	+ 0.7
Machinery (Exc. Elec.)—Total	73.6	71.7	+ 1.5
Metalworking Machinery	17.2	16.8	+ 0.4
Spec. Ind. Machinery	21.7	20.7	+ 1.0
Other Machinery	34.7	34.0	+ 0.5
Electrical Machinery—Total	88.7	85.3	+ 3.4
Communication Equipment	25.5	23.8	+ 1.7
Electronic Components	26.6	25.0	+ 1.6
Other Electrical Machinery	26.6	26.5	+ 0.1
Transportation Equipment	27.0	22.1	+ 4.9
Instruments	28.2	26.3	+ 1.9
Nondurable Goods Total	350.9	346.1	+ 4.8
Food	42.1	38.4	+ 0.3
Textiles—Total	39.1	38.4	+ 0.7
Broad Woven—Cotton and Man Made Fibers	4.2	4.6	— 0.4
Broad Woven—Wool	5.2	5.0	+ 0.2
Other Textiles	29.7	28.8	+ 0.9
Apparel—Total	57.4	57.7	— 0.2
Men, Youths and Boys Clothing	11.8	11.7	+ 0.1
Womens, Misses and Children Clothing	29.7	29.3	+ 0.4
Other Apparel	15.9	16.7	— 0.8
Paper	36.4	36.0	+ 0.4
Printing	42.2	42.3	+ 1.3
Chemicals	17.6	18.0	— 0.4
Rubber and Misc. Plastic Products	37.2	36.8	+ 0.4
Leather—Total	49.0	36.8	+ 0.2
Leather Tanning and Finishing	6.1	6.1	——
Footwear (Exc. Rubber)	33.3	33.3	——
Miscellaneous Manufacturing	29.6	29.4	+ 0.2
NONMANUFACTURING	1,371.7	1,335.9	+35.8
Contract Construction	95.5	93.1	+ 2.4
Transportation and Public Utilities	102.4	103.3	— 0.9
Trade, Wholesale and Retail	419.5	408.5	+11.0
Finance, Insurance and Real Estate	106.8	106.7	+ 0.1
Service, Miscellaneous and Mining	363.3	351.8	+11.5
Government—Total	284.2	272.5	+11.7
Federal	61.9	62.0	— 0.1
State and Local	222.3	210.5	+11.8

Source: The Commonwealth of Massachusetts, Department of Labor and Industries, Division of Statistics, *Employment Newsletter*, December, 1965.

TABLE 30

MASSACHUSETTS EMPLOYMENT IN MANUFACTURING
SELECTED YEARS — 1947-1964
(thousands of employees)

	1947	*1954*	*1958*	*1963*	*1964*
All Manufacturing—Total	730.7	692.2	665.7	663.5	647.3
Durable Goods	279.6	290.2	295.1	313.8	304.6
Electrical Machinery	60.0	80.1	82.7	88.9	83.6
Machinery, Except Electrical	81.1	67.8	70.3	70.2	71.5
Fabricated Metal Products	40.9	39.7	38.6	38.3	38.5
Instruments and Related Products	19.6	21.1	22.1	26.1	26.2
Primary Metals	24.8	22.4	22.4	20.9	20.8
Transportation Equipment	19.9	25.1	24.9	20.7	19.8
Ordnance	4.5	5.9	13.5	20.5	16.2
Furniture and Fixtures	10.6	12.3	11.9	12.0	12.2
Stone, Clay and Glass	9.4	10.1	10.3	10.5	10.8
Lumber and Wood Products	8.8	5.8	5.5	5.3	5.1
Nondurable Goods	451.1	401.9	370.5	349.7	342.7
Apparel and Related Products	52.8	59.1	58.5	57.5	56.8
Leather and Leather Products	74.3	67.4	60.8	49.9	48.3
Textile Mill Products	122.1	71.3	50.8	34.1	39.6
Food and Kindred Products	51.7	50.4	47.5	42.9	41.8
Printing and Publishing	36.2	37.0	37.7	40.1	40.5
Paper and Allied Products	34.4	35.1	35.5	35.9	35.3
Rubber and Plastic Products	35.1	30.9	33.5	35.4	35.7
Chemicals and Allied Products	16.8	17.1	18.3	18.2	18.1
Miscellaneous	27.7	33.6	26.6	28.0	26.5

Source: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Farming Statistics for States and Areas, 1939-1963, and 1939-1964. Bureau of Labor Statistics Regional Office in Boston.

TABLE 31

UNION MEMBERSHIP IN THE UNITED STATES

Year	*Union Members (Thousands)*	*Members as Per Cent of Non-Agricultural Employment*
1953	——	34.1
1954	——	35.1
1955	——	33.6
1956	17,490	33.4
1957	17,369	32.8
1958	17,029	33.1
1959	17,117	32.1
1960	17,049	31.4
1961	16,303	30.1
1962	16,586	29.7
1963	16,559	29.2
1964	17,187	29.5

Source: Massachusetts Board of Economic Advisors. First Annual Report. News from the U. S. Department of Labor, September 16, 1965 and January 19, 1966.

BUSINESS INDICATORS OCTOBER, 1964-1965

Bureau of Research and Statistics
Mass. Department of Commerce and Development

Items	*Area*	*Oct. 1965 (000)*	*Oct. 1964 (000)*	*% Increase or Decrease Oct. '64 to Oct. '65*
Non-Agricultural Employment[1]	Mass.	2,043.7	1,983.5	3.0
Contract Construction[1]	"	97.0	93.6	3.6
Transportation and Public Utilities[1]	"	101.8	103.4	— 1.5
Trade—Wholesale and Retail[1]	"	416.0	404.5	2.8
Finance, Insurance and Real Estate[1]	"	106.6	106.6	——
Service, Miscellaneous and Mining[1]	"	365.6	353.8	3.3
Government—Total[1]	"	284.6	271.7	4.7
Federal[1]	"	61.8	62.1	— 0.5
State and Local[1]	"	222.8	209.6	6.3
Manufacturing—Total[1]	"	672.1	649.9	3.4
Durable Goods[1]	"	321.1	305.3	5.2
Nondurable Goods[1]	"	351.0	344.6	1.9
Manufacturing Production Workers[1]	"	490.7	472.2	3.9
Average Weekly Earnings[1]	"	$98.95	$94.64	4.6
Average Hourly Earnings[1]	"	$ 2.48	$ 2.39	3.8
Average Weekly Hours[1]	"	39.9	40.4	0.8
Unemployment[2]	"	86.3	103.5	—16.6
Construction Permits (234 Municipalities) [1]	"	$94,556,010	$59,426,756	59.1
Residential[1]	"	$53,178,156	$31,034,516	71.4
Non-Residential[1]	"	$32,079,027	$18,806,747	70.6
Alterations-Repairs[1]	"	$ 9,298,827	$ 9,381,778	— 3.0
Wholesale Price Index (1957-57 = 100)[3]	"	103.1	100.8	2.3
Consumers' Price Index (1957-59 = 100) [3]	"	110.4	108.5	1.8
Retail Price Index (1957-59 = 100)[4]	"	111.6	111.2	1.3
Industrial Power Consumption (1962 = 100)[5]	"	177.2	178.4	7.9
Mass. Industrial Activity Index (1960 = 100) [6]	"	138.8	130.2	6.6

Sources: [1] Mass. Department of Labor and Industries. [2] Division of Employment Security. [3] BLS, U. S. Department of Labor. [4] Mass. Department of Labor and Industries. [5] Electrical Council of New England. [6] Mass. Department of Commerce and Development.

TABLE 33

TOTAL DEMAND DEPOSITS HELD IN MASSACHUSETTS COMMERCIAL BANKS

(in millions of dollars)

Year	*All Commercial Banks*	*Member Banks of Federal Reserve System*
June, 1950	3,267	3,010
" 1951	3,498	3,226
" 1952	3,744	3,443
" 1953	3,630	3,324
" 1954	3,676	3,363
" 1955	3,796	3,464
" 1956	3,956	3,623
" 1957	3,873	3,551
" 1958	4,244	3,883
" 1959	4,137	3,761
" 1960	4,293	3,894
" 1961	4,328	3,912
" 1962	4,517	4,068
" 1963	4,643	4,153
" 1964	4,179	4,219
" 1965	4,966	4,449

Source: Financial Section, Research Department, Federal Reserve Bank of Boston.

TABLE 34

DEBITS TO DEMAND DEPOSIT ACCOUNTS AT COMMERCIAL BANKS LOCATED IN STANDARD METROPOLITAN STATISTICAL AREAS IN MASSACHUSETTS

(Seasonally Adjusted Annual Rate)
(in millions of dollars)

SMSA	*June '65*	*June '64*	*Percent Change*
Boston	115,445	90,935	+27.0
Brockton	1,665	1,477	+12.1
Fall River	1,060	930	+14.0
Lawrence-Haverhill	2,202	2,079	+ 5.9
Lowell	1,659	1,517	+ 9.4
New Bedford	1,363	1,217	+12.0
Pittsfield	949	860	+10.3
Springfield-Chicopee-Holyoke	7,526	7,007	+ 7.4
Worcester	5,205	4,449	+17.0
Total of SMSA's in Mass.	137,064	110,471	+24.1

Source: Financial Section, Research Department, Federal Reserve Bank of Boston.

TABLE 35

TOTAL TIME DEPOSITS HELD BY SELECTED FINANCIAL INSTITUTIONS IN MASSACHUSETTS

(in millions of dollars)

Date	*All Commercial Banks*	*All Savings Banks*	*All Savings & Loan Assoc.*[1]	*All Credit Unions*[2]
June, 1950	756	3,330	795	70
" 1951	723	3,358	864	78
" 1952	709	3,529	931	90
" 1953	701	3,752	1,054	103
" 1954	715	4,008	1,177	116
" 1955	696	4,348	1,292	130
" 1956	733	4,663	1,400	146
" 1957	713	4,854	1,510	159
" 1958	756	5,146	1,623	178
" 1959	782	5,438	1,746	195
" 1960	783	5,646	1,831	214
" 1961	917	6,019	1,970	235
" 1962	1,104	6,475	2,148	256
" 1963	1,279	6,967	2,343	282
" 1964	1,521	7,564	2,509e	314
" 1965	1,831	8,206	2,687e	343e

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[1] Savings and Loan Associations including Cooperative Banks. Data is for December of each year. Source of data: Federal Home Loan Bank, Board, Washington, D. C., *Trends in Savings & Loan Field.*

[2] All Credit Unions source of data: *Federal Credit Unions Report of Operations for each year,* Bureau of Federal Credit Unions, Social Security Administration. State Credit Unions. *Annual Report of Bank Commissioner of State of Massachusetts,* Credit Union Section.

e = estimate.

Source: Financial Section, Research Department, Federal Reserve Bank of Boston.

TABLE 36

TOTAL LOANS HELD BY SELECTED FINANCIAL INSTITUTIONS IN MASSACHUSETTS

(in millions of dollars)

Date	*All Commercial Banks*	*Member Banks of Federal Reserve System*	*All Savings Banks*	*All Savings & Loan Assoc.*[1]	*All Credit Unions*[2]
June, 1950	1,319	1,194	1,213	766	45
" 1951	1,676	1,539	1,469	850	51
" 1952	1,709	1,562	1,677	912	59
" 1953	1,909	1,750	1,915	1,036	72
" 1954	1,873	1,803	2,150	1,170	84
" 1955	2,152	1,968	2,477	1,294	95
" 1956	2,457	2,249	2,787	1,401	108
" 1957	2,587	2,377	3,009	1,477	123
" 1958	2,548	2,324	3,208	1,570	133
" 1959	2,748	2,503	3,499	1,683	146
" 1960	3,011	2,730	3,818	1,804	171
" 1961	3,073	2,767	4,245	1,957	187
" 1962	3,320	2,966	4,697	2,142	207
" 1963	3,578	3,184	5,215	2,281	231
" 1964	4,003	3,574	5,786	2,524e	260
" 1965	4,502	4,021	6,415	2,675e	268

[1] Savings and Loan Associations including Cooperative Banks. Data is for December of each year. Source of data: Federal Home Loan Bank, Board, Washington, D. C., *Trends in Savings & Loan Field.*

[2] All Credit Unions source of data: *Federal Credit Unions Report of Operations for each year,* Bureau of Federal Credit Unions, Social Security Administration. State Credit Unions. *Annual Report of Bank Commissioner of State of Massachusetts,* Credit Union Section.

e = estimate.

Source: Financial Section, Research Department, Federal Reserve Bank of Boston.

TABLE 37

Business Loans and Real Estate Loans Secured by Non-Residential and Non-Farm Property Outstanding at Commercial Banks and Savings Banks in Massachusetts

(in millions of dollars)

Date	*Business Loans Commercial Banks*[1]	*Real Estate Loans Secured by Non-Residential and Non-Farm Properties Outstanding at Commercial Banks*	*Real Estate Loans Secured by Non-Residential and Non-Farm Properties Outstanding at Savings Banks*
June, 1950	701	82	217
" 1951	999	90	231
" 1952	994	94	213
" 1953	1,077	104	244
" 1954	1,083	108	257
" 1955	1,144	128	293
" 1956	1,390	142	323
" 1957	1,470	154	341
" 1958	1,430	152	355
" 1959	1,531	169	376
" 1960	1,693	198	414
" 1961	1,704	212	422
" 1962	1,824	239	484
" 1963	1,984	259	566
" 1964	2,156	298	649
" 1965	2,458	323	776

[1] Includes Loans to Commercial and Industrial Corporations, Sales Finance Companies, Mortgage Companies, Business Credit Companies, Insurance Companies.

Source: Financial Section, Research Department, Federal Reserve Bank of Boston.

TABLE 38

TOTAL PERSONAL INCOME 1929, 1940 AND 1950-1964
(in millions of dollars)

Year	*Massachusetts*	*New England*	*United States*
1924	3,882	7,125	85,661
1940	3,385	6,398	78,522
1950	7,799	15,180	225,473
1951	8,505	16,809	252,960
1952	8,855	17,725	269,050
1953	9,333	18,697	283,140
1954	9,403	18,857	285,339
1955	10,056	20,200	306,598
1956	10,719	21,642	330,380
1957	11,346	22,793	348,724
1958	11,668	23,339	357,498
1959	12,381	24,701	381,326
1960*	12,952	25,904	399,028
1961*	13,579	27,002	415,182
1962*	14,269	28,526	439,977
1963*	14,889	29,780	461,670
1964*	15,828	31,731	491,004

* U. S. Total includes Alaska and Hawaii, 1960-1964, but not in earlier years.

TABLE 38A

TOTAL PERSONAL INCOME — PERCENT CHANGE 1948-1964

	1948-64	*1953-64*	*1957-64*	*1961-64*	*1963-64*
United States	137	73	41	18	6
New England	127	70	39	18	7
Massachusetts	124	70	40	17	6

Sources: Survey of Current Business, U. S. Department of Commerce, Office of Business Economics, July, 1965, Vol. 45, No. 7, p. 10 and April, 1965, p. 18.

TABLE 39

PER CAPITA PERSONAL INCOME 1929, 1940 AND 1950-1964
(in millions of dollars)

Year	*Massachusetts*	*New England*	*United States*
1929	913	876	703
1940	784	757	595
1950	1,664	1,629	1,485
1951	1,827	1,810	1,650
1952	1,904	1,894	1,728
1953	1,942	1,942	1,789
1954	1,915	1,918	1,771
1955	2,060	2,046	1,866
1956	2,192	2,180	1,975
1957	2,302	2,272	2,047
1958	2,329	2,284	2,063
1959	2,420	2,367	2,163
1960*	2,511	2,459	2,217
1961*	2,609	2,536	2,268
1962*	2,727	2,650	2,367
1963*	2,811	2,723	2,448
1964*	2,965	2,866	2,566

* U. S. Total includes Alaska and Hawaii, 1960-1964, but not in earlier years.

PER CAPITA PERSONAL INCOME — PERCENT CHANGE 1948-1964

	1948-64	*1953-64*	*1957-64*	*1961-64*	*1963-64*
United States	81	43	25	13	5
New England	90	48	26	13	5
Massachusetts	96	53	29	14	5

Sources: Survey of Current Business, U. S. Department of Commerce, Office of Business Economics, July, 1965, p. 11.

TABLE 40

Total Disposable Personal Income 1929, 1940 and 1946-1963 (in thousands of dollars)

Year	*Massachusetts*	*New England*	*United States**
1929	3,724	6,901	83,020
1940	3,261	6,169	75,924
1946	5,562	10,874	157,003
1947	5,739	11,478	167,731
1948	6,250	12,457	186,419
1949	6,339	12,570	186,944
1950	6,996	13,769	204,729
1951	7,451	14,813	223,992
1952	7,656	15,427	235,005
1953	8,096	16,306	247,752
1954	8,259	16,676	252,758
1955	8,811	17,789	271,240
1956	9,392	18,969	290,792
1957	9,928	19,971	306,510
1958	10,250	20,537	315,476
1959	10,793	21,613	334,935
1960	11,160	22,428	346,113
1961	11,801	23,479	360,677
1962	12,329	24,725	380,430
1963	12,829	25,742	398,251

* Excludes Alaska and Hawaii, and income of U. S. citizens stationed abroad temporarily.

TABLE 41

PER CAPITA DISPOSABLE PERSONAL INCOME 1929, 1940 AND 1946-1963

Year	*Massachusetts*	*New England*	*United States**
1929	881	849	682
1940	755	730	575
1946	1,226	1,221	1,116
1947	1,251	1,267	1,168
1948	1,337	1,349	1,276
1949	1,337	1,340	1,257
1950	1,492	1,477	1,354
1951	1,616	1,606	1,460
1952	1,656	1,661	1,509
1953	1,697	1,707	1,565
1954	1,700	1,714	1,568
1955	1,827	1,828	1,651
1956	1,952	1,940	1,739
1957	2,038	2,013	1,800
1958	2,064	2,026	1,821
1959	2,123	2,083	1,900
1960	2,164	2,129	1,932
1961	2,268	2,205	1,980
1962	2,356	2,297	2,057
1963	2,422	2,353	2,122

Source: Survey of Current Business, April, 1965, pp. 21-22.

TABLE 42

REAL DISPOSABLE PERSONAL INCOME 1929, 1940 AND 1946-1963
(in millions of 1954 dollars)

Year	*Massachusetts*	*New England*	*United States**
1929	5,896	11,141	134,773
1940	6,175	11,791	152,765
1946	6,964	13,730	205,233
1947	6,672	13,281	198,264
1948	6,858	13,658	208,289
1949	7,055	13,995	210,760
1950	7,710	15,159	227,730
1951	7,704	15,407	233,325
1952	7,768	15,653	234,801
1953	8,189	16,498	250,255
1954	8,259	16,676	252,758
1955	8,770	17,713	270,159
1956	9,099	18,433	284,811
1957	9,426	18,951	291,637
1958	9,533	19,067	294,013
1959	9,961	19,870	308,696
1960	10,135	20,293	314,362
1961	10,639	21,096	324,642
1962	10,979	21,941	339,670
1963	11,257	22,462	351,191

* Excludes Alaska and Hawaii, and income of U. S. citizens stationed abroad temporarily.

Source: Survey of Current Business, April, 1965, p. 23.

TABLE 43

PER CAPITA REAL DISPOSABLE PERSONAL INCOME 1929, 1940 *and* 1946-1963 (in 1954 dollars)

Year	*Massachusetts*	*New England*	*United States**
1929	1,394	1,370	1,107
1940	1,430	1,396	1,158
1946	1,535	1,541	1,459
1947	1,454	1,466	1,380
1948	1,467	1,479	1,426
1949	1,488	1,492	1,418
1950	1,644	1,627	1,506
1951	1,671	1,671	1,621
1952	1,681	1,685	1,549
1953	1,717	1,728	1,581
1954	1,700	1,714	1,568
1955	1,818	1,821	1,644
1956	1,891	1,886	1,703
1957	1,935	1,910	1,713
1958	1,919	1,881	1,697
1959	1,960	1,915	1,751
1960	1,965	1,926	1,755
1961	2,044	1,981	1,782
1962	2,098	2,038	1,836
1963	2,126	2,054	1,871

* Excludes Alaska and Hawaii, and income of U. S. citizens stationed abroad temporarily.

Source: Survey of Current Business, April, 1965, p. 24.

TABLE 44

PERSONAL INCOME BY MAJOR SOURCES, 1962-1964
MASSACHUSETTS
(in millions of dollars)

	1962	*1963*	*1964*
Personal Income	14,269	14,889	15,828
Wage and salary disbursements	9,756	10,113	10,639
Farms	30	30	26
Mining	12	12	14
Anthracite	——	——	——
Bituminous and other soft coal	——	——	——
Crude petroleum and natural gas	1	1	1
Mining and quarrying, except fuel	11	12	13
Contract construction	400	472	543
Manufacturing	3,591	3,565	3,677
Wholesale and retail trade	1,747	1,845	1,934
Finance, insurance and real estate	535	561	596
Banking and other finance	213	222	234
Insurance and real estate	323	340	361
Transportation	319	324	336
Railroads	67	66	64
Highway freight and warehousing	145	152	165
Other transportation	107	105	106
Communications and public utilities	285	296	319
Telephone, telegraph and other communications	163	169	182
Electric, gas, and other public utilities	122	128	136
Services	1,283	1,373	1,478
Hotel and other lodging places	44	45	46
Personal services and private households	223	224	229
Business and repair services	284	314	339
Amusement and recreation	46	47	50
Professional, social and related services	687	742	815
Government	1,485	1,602	1,684
Federal, civilian	394	424	439
Federal, military	210	195	206
State and local	881	983	1,040
Other industries	29	33	32
Other labor income	398	412	436
Proprietor's income	970	998	1,039
Farm	34	30	36
Nonfarm	936	968	1,003
Property income	1,964	2,112	2,388
Transfer payments	1,508	1,627	1,717
Less: Personal contributions for social insurance	326	373	390

Source: Survey of Current Business, July, 1965, p. 13.

TABLE 45

BROAD INDUSTRIAL SOURCES OF PERSONAL INCOME
(in millions of dollars)

1957

	Massachusetts	*New England*
Total personal income	11,346	22,793
Farm income	71	295
Government income disbursements		
Federal	1,237	2,309
State and local	767	1,404
Private nonfarm income	9,271	18,785

1961

	Massachusetts	*New England*
Total personal income	13,579	27,002
Farm income	61	256
Government income disbursements		
Federal	1,802	3,359
State and local	979	1,866
Private nonfarm income	10,737	21,621

1964

	Massachusetts	*New England*
Total personal income	15,828	31,731
Farm income	60	261
Government income disbursements		
Federal	2,122	3,733
State and local	1,220	2,323
Private nonfarm income	12,426	25,414

Source: Survey of Current Business, U. S. Department of Commerce, Office of Business Economics, July, 1965, Vol. 45, No. 7, Table 63, pp. 17-19.

TABLE 46

INDUSTRIAL SOURCES OF CIVILIAN INCOME RECEIVED BY PERSONS FOR PARTICIPATION IN CURRENT PRODUCTION

(in millions of dollars)

1957

	Massachusetts	*New England*
Total	8,730	17,739
Farms	72	299
Mining	16	33
Contract Construction	508	1,144
Manufacturing	3,257	7,004
Wholesale and retail trade	1,644	3,205
Finance, insurance and real estate	479	938
Transportation	320	614
Communications and public utilities	267	510
Services	1,184	2,198
Government	933	1,692
Other	50	102

1961

	Massachusetts	*New England*
Total	10,358	20,723
Farms	55	245
Mining	14	31
Contract construction	546	1,181
Manufacturing	3,677	7,789
Wholesale and retail trade	1,913	3,686
Finance, insurance and real estate	612	1,194
Transportation	336	642
Communications and public utilities	301	594
Services	1,630	2,958
Government	1,228	2,301
Other	46	102

1964

	Massachusetts	*New England*
Total	11,880	24,098
Farms	62	267
Mining	15	33
Contract construction	695	1,467
Manufacturing	3,947	8,714
Wholesale and retail trade	2,206	4,303
Finance, insurance and real estate	705	1,384
Transportation	370	714
Communications and public utilities	352	684
Services	1,988	3.614
Government	1,488	2,801
Other	52	117

Source: Survey of Current Business, July, 1965, Table 70, pp. 17-19.

TABLE 47

Cities and Towns in Massachusetts Eligible to Apply for Assistance Under the Public Works and Economic Development Act of 1965

The following cities and towns in Massachusetts are included in the Labor areas found eligible to apply for "grants for public works and development facilities, and other financial assistance and the planning and coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions."

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under:*	
			Title I	*Title IV*
Abington	Plymouth	Brockton	X	
Acushnet	Bristol	New Bedford		X
Adams	Berkshire	North Adams		X
Agawam	Hampden	Springfield-Chicopee-Holyoke	X	
Amesbury	Essex	Newburyport		X
Andover	Essex	Lawrence-Haverhill	X	
Attleboro	Bristol	Providence-Pawtucket, R. I.		X
Avon	Norfolk	Brockton	X	
Belchertown	Hampshire	Ware	X	
Bellington	Norfolk	Providence-Pawtucket, R. I.		X
Berkley	Bristol	Taunton	X	
Billerica	Middlesex	Lowell		X
Blackstone	Worcester	Providence-Pawtucket, R. I.		X
Bourne	Barnstable	Bourne-Wareham		X
Bridgewater	Plymouth	Ware	X	
Brimfield	Hampden	Brockton	X	
Brockton	Plymouth	Brockton	X	

TABLE 47—Continued

CITIES AND TOWNS IN MASSACHUSETTS ELIGIBLE TO APPLY FOR ASSISTANCE UNDER THE PUBLIC WORKS AND ECONOMIC DEVELOPMENT ACT OF 1965

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under:*	
			Title I	*Title IV*
Charlton	Worcester	Southbridge-Webster	X	
Chelmsford	Middlesex	Lowell		X
Chicopee	Hampden	Springfield-Chicopee-Holyoke	X	
Chilmark	Dukes*	**		X
Clarksburg	Berkshire	North Adams		X
Dalton	Berkshire	Pittsfield	X	
Dartmouth	Bristol	New Bedford		X
Dighton	Bristol	Taunton	X	
Douglas	Worcester	Southbridge-Webster	X	
Dracut	Middlesex	Lowell		X
Dudley	Worcester	Southbridge-Webster	X	
East Bridgewater	Plymouth	Brockton	X	
East Longmeadow	Hampden	Springfield-Chicopee-Holyoke	X	
Easthampton	Hampshire	Springfield-Chicopee-Holyoke	X	
Easton	Bristol	Brockton	X	
Edgartown	Dukes*	**	X	
Essex	Essex	Gloucester		X
Fairhaven	Bristol	New Bedford		X
Fall River	Bristol	Fall River		X
Florida	Berkshire	North Adams		X
Franklin	Norfolk	Providence-Pawtucket, R. I.		X

TABLE 47—Continued

Cities and Towns in Massachusetts Eligible to Apply for Assistance Under the Public Works and Economic Development Act of 1965

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under: Title I*	*Title IV*
Gay Head	Dukes*	**		X
Georgetown	Essex	Lawrence-Haverhill	X	
Gloucester	Essex	Gloucester		X
Gosnold	Dukes*	**		X
Granby	Hampshire	Springfield-Chicopee-Holyoke	X	
Groveland	Essex	Lawrence-Haverhill	X	
Hadley	Hampshire	Springfield-Chicopee-Holyoke	X	
Halifax	Plymouth	Taunton	X	
Hampden	Hampden	Springfield-Chicopee-Holyoke	X	
Hanson	Plymouth	Brockton	X	
Hardwich	Worcester	Ware	X	
Haverhill	Essex	Lawrence-Haverhill	X	
Holland	Hampden	Ware	X	
Holyoke	Hampden	Springfield-Chicopee-Holyoke	X	
Hopedale	Worcester	Milford	X	
Ipswich	Essex	Newburyport		X
Kingston	Plymouth	Plymouth		X
Lakeville	Plymouth	Taunton	X	
Lanesborough	Berkshire	Pittsfield	X	
Lawrence	Essex	Lawrence-Haverhill	X	
Lee	Berkshire	Pittsfield	X	

TABLE 47—Continued

Cities and Towns in Massachusetts Eligible to Apply for Assistance Under the Public Works and Economic Development Act of 1965

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under:*	
			Title I	*Title IV*
Lenox	Berkshire	Pittsfield	X	
Longmeadow	Hampden	Springfield-Chicopee-Holyoke	X	
Lowell	Middlesex	Lowell		X
Ludlow	Hampden	Springfield-Chicopee-Holyoke	X	
Lunenburg	Worcester	Fitchburg-Leominster	X	
Marion	Plymouth	New Bedford		X
Mattapoisett	Plymouth	New Bedford		X
Medway	Norfolk	Milford	X	
Mendon	Worcester	Milford	X	
Merrimack	Essex	Lawrence-Haverhill	X	
Methuen	Essex	Lawrence-Haverhill	X	
Middleboro	Plymouth	Taunton	X	
Millville	Worcester	Providence-Pawtucket, R. I.		X
Monroe	Franklin	North Adams		X
Monson	Hampden	Springfield-Chicopee-Holyoke	X	
Nantucket	Nantucket	Nantucket	X	
New Ashford	Berkshire	North Adams		X
New Bedford	Bristol	New Bedford	X	
New Braintree	Worcester	Ware	X	
Newbury	Essex	Newburyport		X
Newburyport	Essex	Newburyport		X
North Adams	Berkshire	North Adams		X

TABLE 47—Continued

Cities and Towns in Massachusetts Eligible to Apply for Assistance Under the Public Works and Economic Development Act of 1965

Municipality	*County*	*Labor Area*	*Consideration Under: # Qualified for Title I*	*Title IV*
North Andover	Essex	Lawrence-Haverhill	X	
Northampton	Hampshire	Springfield-Chicopee-Holyoke	X	
North Attleboro	Bristol	Providence-Pawtucket, R. I.		X
Norton	Bristol	Taunton	X	
Oak Bluffs	Dukes*	**		X
Oakham	Worcester	Ware	X	
Palmer	Hampden	Springfield-Chicopee-Holyoke	X	
Pittsfield	Berkshire	Pittsfield	X	
Plainville	Norfolk	Providence-Pawtucket, R. I.		X
Plymouth	Plymouth	Plymouth		X
Plympton	Plymouth	Plymouth		X
Provincetown	Barnstable	Provincetown		X
Raynham	Bristol	Taunton	X	
Rockport	Essex	Gloucester		X
Rowley	Essex	Newburyport		X
Rehoboth	Bristol	Providence-Pawtucket, R. I.		X
Salisbury	Essex	Newburyport		X
Savoy	Berkshire	North Adams		X
Seekonk	Bristol	Providence-Pawtucket, R. I.		X
Shirley	Middlesex	Fitchburg-Leominster	X	
Somerset	Bristol	Fall River		X

TABLE 47—Continued

CITIES AND TOWNS IN MASSACHUSETTS ELIGIBLE TO APPLY FOR ASSISTANCE UNDER THE PUBLIC WORKS AND ECONOMIC DEVELOPMENT ACT OF 1965

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under:*	
			Title I	*Title IV*
South Hadley	Hampshire	Springfield-Chicopee-Holyoke	X	
Southbridge	Worcester	Southbridge-Webster	X	
Southwick	Hampden	Springfield-Chicopee-Holyoke	X	
Springfield	Hampden	Springfield-Chicopee-Holyoke	X	
Stoughton	Norfolk	Southbridge-Webster	X	
Sturbridge	Worcester	Southbridge-Webster	X	
Swansea	Bristol	Fall River		X
Taunton	Bristol	Taunton	X	
Tewksbury	Middlesex	Lowell		X
Tisbury	Dukes*	**		X
Townsend	Middlesex	Fitchburg-Leominster	X	
Truro	Barnstable	Provincetown		X
Tyngsborough	Middlesex	Lowell		X
Uxbridge	Worcester	Milford	X	
Wales	Hampden	Ware	X	
Ware	Hampshire	Ware	X	
Wareham	Plymouth	Bourne-Wareham		X
Warren	Worcester	Springfield-Chicopee-Holyoke	X	
Webster	Worcester	Southbridge-Webster	X	
W. Bridgewater	Plymouth	Brockton	X	
W. Brookfield	Worcester	Ware	X	

TABLE 47—Continued

CITIES AND TOWNS IN MASSACHUSETTS ELIGIBLE TO APPLY FOR ASSISTANCE UNDER THE PUBLIC WORKS AND ECONOMIC DEVELOPMENT ACT OF 1965

Municipality	*County*	*Labor Area*	*# Qualified for Consideration Under:*	
			Title I	*Title IV*
W. Newbury	Essex	Lawrence-Haverhill	X	
W. Springfield	Hampden	Springfield-Chicopee-Holyoke	X	
West Tisbury	Dukes*	**		X
Westfield	Hampden	Springfield-Chicopee-Holyoke	X	
Westford	Middlesex	Lowell		X
Westminster	Worcester	Fitchburg-Leominster	X	
Westport	Bristol	Fall River		X
Whitman	Plymouth	Brockton	X	
Wilbraham	Hampden	Springfield-Chicopee-Holyoke	X	
Williamstown	Berkshire	North Adams		X
Wrentham	Norfolk	Providence-Pawtucket, R. I.		X

* Designated as a "redevelopment area" by the Secretary of Commerce because median family income not in excess of 40 percentum of the national median, as determined by most recent available statistics.

** Does not meet criteria for definition as a labor area.

Title I areas may be eligible *only for Federal grants for public works and development facilities* under the Act.

Title IV areas are potentially *eligible for all types of Federal assistance* under the Act.

Source: Supplement to December issue of Massachusetts Trends in Employment and Unemployment.

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